## Aircrew Training

## KC-135 Pilot Initial Qualification (BLOCK 40)

September 2010



Air Education and Training Command

\_\_\_\_\_ Designed for AETC Course Use \_\_\_\_\_

DEPARTMENT OF THE AIR FORCE

AETC Syllabus KC-135PIQ (Block 40)

Headquarters Air Education and Training Command Randolph AFB TX 78150-4325

September 2010

This syllabus outlines the training required to achieve the proficiency in the course training standards. It prescribes the course content, instructions to conduct the training, and the approximate time required to successfully complete all requirements. Any training not specifically authorized in this syllabus or other appropriate directives is prohibited without prior approval of this headquarters. If a conflict exists between this syllabus and a supporting ATS contract, the original syllabus in place at that time will continue to be executed until the conflict is resolved by AETC, AMC, and AFMC. Forward suggestions for course improvement to: HQ AETC/A3ZM, 1 F STREET, SUITE 2, RANDOLPH AFB TX 78150-4325. Next planned revision is September 2012.

**OFFICIAL** 

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Director of Intelligence, Operations,

and Nuclear Integration

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## **Summary of Changes**

(August 2010 changes)

- Added multiple events to the OFT MIF tables per Quality Assurance Change Proposal (QACP) Q103449
- Removed MLS approach from the OFT MIF tables per QACP Q093363
- Removed —ROBE TIG Malfunctions from Chapter 3, Section B Cockpit Familiarization Training (CFT)
   Maneuver Item File
- Added —Note 2 to the Have Quick, Secure Voice, Authentication, and VFR Arrival items in Chapter 4, Section D Airplane Maneuver Item File.
- Added LAHSA, LAHSD, and Go-Around/Missed Approach to Airplane MIF Table.
- Lesson KPSY.WB combined into KPAD.
- Removed G100 (LOAC) CBT event.
- VTRAT training items added.
- Lesson KYAR1 redesignated as KAAR.
- Lesson KYPM redesignated as KAPM.
- Added two aircraft sorties to bring the total number of sorties to six. One sortie designated as a pattern only sortie.
- Added one Flightline OFT to be taught by Air Force military instructors.
- Course duration increased from 90 training days to 100 training days.
- RPLs changed for several formation and tactics related MIF items.
- Adds S-V80A (SERE Training) and S-V90A (Water Survival) as prerequisite requirements.
- This update incorporates AETCs syllabus standard template.
- Updated guidance regarding conflicts between syllabus and contract in opening paragraph
- Changed Chapter 2 and the Progress Review Process Chart to conform to AETCI 36-2205v7.
- CTS numbers and events updated to align with AFI 11-2KC-135v2, 26 May 2010.
- Updated Bibliography.

#### (September 2010 changes)

- On ATD MIF table, changed "Preparation of Contact Checklist" to "Preparation of Air Refueling Checklist" per Quality Assurance Change Proposal (QACP) Q103535 (Administrative oversight. Currently taught at FTU)
- On ATD MIF table, added "Engine Shutdown Checklist" per QACP Q103535 (Administrative oversight. Currently taught at FTU)
- On OFT MIF table, deleted "Precision Approach," "Proceeding Direct to a Fix" and "Runway Stab Trim (NU) during Touch and Go" as training items per QACP Q103535 (Administrative oversight. Each variant of precision approach is required by other MIF items no need to dual log)
- On OFT MIF table, Low Altitude Procedures PL changed from 3B to 3C per QACP Q103540 (Administrative oversight.)
- On Airplane Maneuver Item File (MIF) table, (OFT only) added to LAHSA and LAHSD for clarification per Q103540.

# Chapter 1 Course Description

- 1. Course Title KC-135 Pilot Initial Qualification
- 2. Course Number KC135PIQ
- **3.** Course Objective Formal school course that qualifies pilots (SUPT graduates) in initial aircraft qualification operations in KC-135 aircraft IAW AFI 11-2KC-135, Vol. 1, *C/KC-135 Aircrew Training*. Includes academic, simulator, and flying training.
- **4. Location** Altus AFB, Oklahoma.
- **5. Course Duration**—100 training days. For exact training duration, see Quota Management Worksheets at https://wwwd.my.af.mil/afknprod/ASPs/docman/DOCMain.asp?Tab=0&FolderID=OO-OP-AE-57&Filter=OO-OP-AE-57.

#### 6. Course Entry Prerequisites

- a. Individual must meet the requirements and qualifications IAW AFI 11-2KC-135, Vol. 1, *C/KC-135 Aircrew Training* and AFI 11-202, Vol. 1, *Aircrew Training*.
- b. Before departing for training, students who do not meet required prerequisites must obtain a waiver from 19 AF/DO, who will coordinate prerequisite waiver requests with the appropriate MAJCOM.
- c. Individual must be qualified for flying duty.
- d. Flight physical must be current for at least 30 days after course completion.
- e. Physiological training must be current for at least 30 days after course completion.
- f. Individual must possess a Secret clearance, granted US Access in JPAS. Security clearance must be indicated on travel orders and will be validated upon in-processing.
- g. Individual must complete and sign AF Form 63, Active Duty Service Commitment Acknowledgement Statement, prior to class start date. (N/A ANG)
- h. Information Assurance (IA): Certificate of Training for IAAP IAW AFI 22-204, *Information Assurance (IA) Awareness Program.* Copy of student's DD Form 2875, *System Authorization Access Request (SAAR)*. IAAP training must be current.
- i. Refer to the Education and Training Course Announcements (ETCA) (<a href="https://etca.randolph.af.mil">https://etca.randolph.af.mil</a>) for additional administrative information and reporting instructions.
- j. Individuals must complete S-V80A (SERE Training) and S-V90A (Water Survival) prior to attending this course.

#### 7. Status Upon Graduation

Graduates of this course are awarded an AF Form 1256, Certificate of Training and an AF Form 8, Certificate of Aircrew Qualification, according to AFI 11-202, Vol. 2, *Aircrew Standardization/Evaluation Program*, and AFI 11-2KC-135, Vol. 2, *C/KC-135 Aircrew Evaluation Criteria*. In addition, graduates will also be awarded a recommendation for Tactics Certification in accordance with AFI 11-2KC-135, Vol.1.

**8.** Equipment Required — See ETCA (<a href="https://etca.randolph.af.mil">https://etca.randolph.af.mil</a>).

## 9. Training Methodology

PIQ training for the KC-135 places heavy emphasis on a combination of computer based/instructor based training (C/IBT) and Operational Flight Trainer session as the primary academic medium. **NOTE:** Crew Resource Management (CRM) principles are emphasized throughout the course.

## 10. Ground Training:

## a. Academic Training

Academic Training	Hours
Preparatory Training	26.0
CNS/ATM	15.0
Flight Management Systems	22.5
Aircraft Systems	26.0
Mission Planning	27.0
Air Refueling	7.0
Operations	17.0
CFT/ATD/OFT Guided Discussions	66.5
Emergency Procedures	7.0
Examinations	10.0
Aircrew Flight Equipment/Egress Training	16.0
Mission Qualification Ground Training	17.8
Total	257.8

**Note:** Academic training hours include CFT hours.

## 11. Device /Flying Training

a. Aircrew Training Device (ATD in OFT)	Unit	Events/Hr
	KPNM5	1/3.0
	KPNM6	1/3.0
	KPAD1	1/2.0
	KPAD2	1/2.0
	KPAD3	1/2.0
	KPAD4	1/2.0
	KPAD5	1/2.0
	KPAD6	1/2.0
	KPAD7	1/2.0
	KPAD8	1/2.0
	KPAD9	1/2.0
	KPAD10	1/2.0
	KPAD11	1/2.0

	KPADIU	1/2.0
	KPAD11	1/2.0
Total		13/28.0
b. Operational Flight Trainer (OFT)	Unit	Events/Hr
	KPMD01	1/4.0
	KPMD02	1/4.0
	KPMD03	1/4.0
	KPMD04	1/4.0
	KPMD05	1/4.0
	KPMD06	1/4.0
	KPMD07	1/4.0
	KPMD08	1/4.0
	KPMD09	1/4.0
	KPMD10	1/4.0
	KPMD11	1/4.0
	KPMD12	1/4.0
	KPMD13	1/4.0
	KPMD14	1/4.0
	KPMD15	1/4.0
	KPMD16	1/4.0
	KPMD17	1/4.0

	KPMD18	1/4.0
	KPMD19	1/4.0
	KPMD20	1/4.0
	KPMD21	1/4.0
	KPMD22	1/4.0
	KPMD23	1/4.0
	KPMD24	1/4.0
Total		24/96.0
c. KC-135 Aircraft	Unit	Events/Hr
•	KPIB1	1/6.0
	KPIB2	1/3.0
	KPIB3	1/6.0
	KPIB4	1/5.5
	KPIB5	1/5.5
Check Ride Evaluation	KPIB6	1/4.5
Total		6/30.5
d. KC-135 Flightline OFT	Unit	Events/Hr
o .	Flightline OFT	1/3.0

#### **Notes:**

- (1) KPNM5 and KPNM6 include .5 hour prebrief and .5 hour debrief.
- (2) KPAD1 includes a 2.0 hour guided discussion, and a .5 hour prebrief and debrief. KPAD2-11 lessons include a 2.0 hour guided discussion, a .3 hour prebrief and a .5 hour debrief.
- (3) KPMD13, 17, 23 include a 1.0 hour prebrief and a 1.0 hour debrief. All other KPMD OFTs include a .5 hour prebrief and a 1.0 hour debrief.
- (4) Each flight-training period includes a 1 hour prebrief, 4 hour mission planning, 3 hour preflight, varying sortie length, 1 hour crew debrief and 2 hours for flight debrief (all of which should be completed on a different day than the flight). All debriefs will be complete prior to the next sortie.
- (5) Flightline OFT will be instructed by AF instructors.
- (6) Flightline is responsible for coordinating with the contractor for OFT scheduling. If the OFT needs to be rescheduled, contractor will be given 24-hour notice of change.
- (7) If unable to accomplish training in the Flightline OFT, an additional aircraft sortie is authorized.

# Chapter 2 Course Administration

### Section A — Syllabus Management

#### 1. Syllabus Interpretation

This syllabus is directive and will be followed as written. If no clear syllabus guidance exists, resolve the situation using the appropriate wing chain of command. If the logical course of action conflicts with other directives, OG Stan/Eval will contact 19 AF/DOH who will coordinate with HQ AETC/A3ZM.

#### 2. Syllabus Waivers

An approved syllabus waiver is required for any *planned* exception to the syllabus caused by special or unusual circumstances. Permanent or blanket waivers are *not* authorized, but should be suggested as syllabus changes. Submit waiver requests electronically or in writing, on AETC Form 6, *Waiver Request*, to the following approval authorities, except where required by other governing directives:

- a. Syllabus waivers: 19 AF/DO.
- b. Syllabus entry prerequisite waivers: 19 AF/DO.
- c. Senior officer syllabus and entry prerequisite waivers: 19AF/CC.

Do not change the order of, omit, or accomplish any training requested in a waiver until notification of approval. Maintain a permanent record of all approved waivers in the student's training record.

#### 3. Syllabus Deviation

A syllabus deviation is any *unplanned* variation from syllabus requirements, such as prerequisite flow, turn times, landing currency, or Maneuver Information File (MIF) requirements. Document *all* syllabus deviations in the student's training record.

All syllabus-directed training must be accomplished unless a waiver request is approved with the following exception: non-U.S. crewmembers will not complete tasks/events or lessons/sorties which are restricted to U.S.-only unless prior written approval was coordinated through HQ AETC/IA. If unforeseen circumstances result in an omission of required training, the ATS site manager or the OG/CC will determine if the omitted training can be accomplished later in the syllabus flow without adversely affecting the quality of student training. Document ATS site manager or OG/CC-directed corrective actions and the accomplishment of the omitted training in the student's training record.

#### 4. Incomplete Training and Disenrollment

Refer to AETCI 36-2205v1, Formal Flying Training Administration and Management and AETCI 36-2205v7, Formal Flying Training Administration and Management-Airlift and Tanker for incomplete training and disensollment guidance.

#### 5. Flying Training Feedback

Aircrew members who have completed training through an AETC formal undergraduate or graduate flying training program will be evaluated on the effectiveness of their previous training IAW AETCI 36-2206, *Aircrew Graduate Evaluation Program (AGEP)*. Refer to AETCI 36-2206, for specific program guidance. Questions/comments concerning the feedback survey content should be directed to AETC/A3ZM (DSN 487-2014). For questions concerning access to the AGEP web link, contact AETC/A3FO (DSN 487-2045).

- a. FTU Graduates The crewmember's gaining unit supervisor should complete the aircrew graduate evaluation survey found on the AGEP link (<a href="https://www.my.af.mil/agepiftprod">https://www.my.af.mil/agepiftprod</a>). Syllabuses may specify if graduate evaluations are not required.
- b. Follow-on Courses The crewmember's primary instructor, ATS designee (per ATS contract), or gaining unit supervisor will complete the aircrew graduate evaluation survey found on the AGEP link (<a href="https://www.my.af.mil/agepiftprod">https://www.my.af.mil/agepiftprod</a>). The survey will be completed at the specified point in the training syllabus or when notified the survey is required.

## Section B — Training Management

#### 1. Training Requirements and Restrictions

a. Course Length — This course is designed to be accomplished in 100 training days:

		Approx	Acad	Proce	dural Tra	iners	,	Simulato	r		Flight		Total Hrs
	Emphasis Area	Trng	Hours	No.	Supp	Msn	No.	Supp	Msn	No.	Supp	Msn	
		Days		Msns	$Hr^1$	Hr	Msns	$Hr^1$	Hr	$Msns^2$	$Hr^1$	$Hr^2$	
a.	Academics <sup>3</sup>	43	257.8										257.8
b.	ATD/OFT	9		13	33.0	28.0							61.0
c.	OFT	24					24	37.5	96.0				133.5
d.	Flightline OFT <sup>4</sup>	1					1	4.0	3.0				7.0
e.	Flight	23								6	66.0	30.5	96.5
f.	Total Training Data	100	257.8	13	33.0	28.0	25	41.5	99.0	6	66.0	30.5	555.8

#### Notes:

- 1. Support hours include briefing, preflight, debriefing, and mission planning.
- 2. Total number of missions and mission hours include the evaluation.
- 3. Academic hours include the hours in the procedural trainer.
- 4. If unable to accomplish training in the Flightline OFT, and additional aircraft sortie is authorized.
- b. *Minimum Academic Performance* The minimum acceptable score on any phase exam or End-of-Course exam is 85 percent. Should a student receive less than the minimum acceptable score, the instructor will remediate the student and a second, different exam for that phase will be administered. Unsatisfactory performance will be referred to the appropriate military authority.
- c. *Minimum Demonstration/Performance Test Standard* The minimum acceptable performance on any demonstration/performance test will be measured against the course standard and the required proficiency level for events requiring a demonstration/performance test.
- d. Minimum Hour Requirement There is no minimum hour/event/sortie requirement for graduation.
- e. *Instructor Responsibilities* Instructors are responsible for training accomplishment; however, students should monitor their own training and develop mission profiles when appropriate.
- f. *Proficiency Advancement* The contractor site manager or squadron operations officer is the approval authority for student proficiency advancement. The student may advance to the next unit of training or flight evaluation provided MIF requirements are met.

#### **Notes:**

- (1) The academic phase consists of systems previews, normal procedures, systems, and nonstandard/emergency procedures, and is conducted through mediated instructor-based training (IBT), computer-based training (CBT), and cockpit familiarization trainer (CFT) and FSAS Trainer (CFT modified with operational FSAS, FMS, IFMP, and MFDs). In addition, other training devices are used to enhance classroom instruction. A fuel panel part-task trainer and an IFMP part-task trainer are used to enhance familiarization with the fuel system controls. The GATM interactive hand controller part-task trainer (GIPTT) is used for practice with the interactive hand controller (IHC), interactive multifunction display (IMFD) menu pages, and datalink operations.
- (2) ATD/OFT Training The aircrew training device/operational flight trainer is used as a nonmotion/nonvisual procedural trainer to provide advanced normal procedures and systems training.
- (3) OFT Training The operational flight trainer is used to provide mission profiles for system, procedural, and aerodynamic training, as well as evaluations.
- (4) Flight Training Students should be recommended for an evaluation flight as soon as they are proficient in all appropriate sub areas of the MIF. Each flight period includes a 1 hour prebrief, 4 hour mission planning, 3 hour preflight, varying sortie length, 1 hour crew debrief and 2 hours for flight debrief (all of which should be completed on a different day than the flight). All debriefs will be complete prior to the next sortie. The evaluation sortie prebrief time is used for the Emergency Procedures Evaluation. Four hours are additionally added for Tactics ground training/briefing.
- (5) Pilot Teams Pilot teams consist of two pilots undergoing formal training. During the academic simulator phase, PIQs will not be teamed with PTX1, PTX2, and PTX3 students due to different course requirements. Additionally, PIQs will not be team certified to fly together during non-critical phases of flight. Pilot team training is not authorized when passengers are onboard.

#### 2. Break-in-Training (BIT)

The contract site manager or squadron operations officer may authorize additional training due to extended training delays. As a guide, consider seven (7) calendar days without an aircraft/OFT sortie an extended break. Use this authority only when the remaining syllabus sorties are insufficient to compensate for the break in training. All additional training will be documented in the student's training record. Additional training sorties will be limited to that required for the student to regain the proficiency level attained prior to the break in training.

#### 3. Flying Safety and Operational Risk Management (ORM)

Develop flying safety awareness by emphasizing emergency procedures, air discipline, judgment, and ORM. Before accomplishing OFT/flying sorties, all crewmembers will be briefed on forecast weather, OPS notes, FCIF topics, NOTAMs and other pertinent information.

#### 4. Cockpit/Crew Resource Management (CRM)

CRM principles will be integrated in all sorties IAW AFI 11-290/AETC SUP 1, Cockpit/Crew Resource Management Training Program. Instructors will discuss CRM skills as part of all training sortie briefings and debriefings. The following items will be discussed:

- a. Mission Planning/Briefing/Debriefing
- b. Situational Awareness
- c. Crew Coordination/Flight Integrity
- d. Communication
- e. Risk Management/Decision Making
- f. Task Management

#### 5. Briefing Requirements

Briefings set the tone of the mission. Briefing times will be established by the instructor for training device missions and flights. Briefing items should be the minimum established in the mission briefing guide. Accomplish a post mission briefing to measure the success of the mission.

#### 6. Demonstrations

Procedures may be demonstrated by the instructor prior to the student attempting them, based upon difficulty and student ability.

### 7. Regression Rules

Regression occurs when a task/event is graded Unsatisfactory (U), after having achieved Proficient (P) in the same task/event. Regression from a "P" to a "U" requires an explanation in the student's training record. However, the overall grade is at the instructor's discretion. For regression, the student will re-obtain proficiency prior to the end of the block/phase of training in order to be recommended for an evaluation (when applicable).

#### 8. Airsickness and Manifestation of Apprehension (MOA)

Instructors will document the student's training record when a student experiences any form of airsickness or MOA. Initial aircrew trainees experiencing airsickness will be sent to the flight surgeon as soon as practical for examination, counseling, and treatment. This visit must be made prior to the next flight. For rated or previously trained aircrew, if airsickness leads to significant deviation from training profile or prevents the student from meeting MIF requirements, the student will be referred to the flight surgeon for evaluation IAW AFI 48-123, *Medical Examinations and Standards*. Airsickness episodes will be documented on AF Form 4293 or a suitable substitute. Regardless of student status, MOA will be managed IAW AETCI 36-2205, Volume 1, *Formal Flying Training Administration and Management* and AETCI 36-2205v7, *Formal Flying Training Administration and Management-Airlift and Tanker*.

#### 9. Visually Induced Motion Sickness (VIMS)

If VIMS is so severe that no simulator training can be accomplished, refer the student to the flight surgeon for evaluation of alternatives. Because VIMS is usually unrelated to airsickness, do not consider students for elimination based solely on VIMS episodes.

#### 10. Commander's Awareness Program (CAP)

The CAP objective is to focus supervisory attention on a student's progress in training, specific deficiencies, and potential to complete the program. CAP may also be used to monitor personal issues requiring supervisory attention. CAP is intended as

a short-term program. A student requiring an extended period of increased supervision or repeated placement on CAP based on performance should be considered for an Elimination Check (EC).

- a. Squadron Commander (SQ/CC) Responsibilities The SQ/CC administers CAP. During contractor-provided training, the SQ/CC with student oversight administers the program. Once a student begins flight line training, the flying SQ/CC administers the program. **Note:** CAP administration may be delegated to the SQ/DO, flight commander (FLT/CC), or designated supervisor, but the SQ/CC maintains overall authority and responsibility.
  - 1) Categories. Units will place students into one or more of the following categories:
    - a) Flying Students demonstrating flying deficiencies in the aircraft.
    - b) Procedural Students exhibiting substandard general or emergency procedure knowledge.
    - c) Academic Students exhibiting substandard academic performance.
    - d) Military Students exhibiting substandard military or professional behavior.
    - e) Other Students with personal issues requiring supervisory attention.

#### 2) CAP Procedures:

- a) Placement. The FLT/CC, SQ/DO, SQ/CC, or designated supervisor places a student on CAP when substandard performance, personal issues, or lost training requires close monitoring of individual progress. The initiating individual will counsel students placed on CAP. Initial counseling will address the reason for CAP placement, CAP objectives, student training plan, instructor continuity, and CAP removal goals.
- b) CAP Student Activities. While students are in CAP the unit will:
  - 1) Tailor training to address the student's particular situation within the limits of the syllabus.
  - 2) Closely monitor instructor continuity.
  - 3) Not compromise proficiency standards to permit CAP students to progress in training. Provide additional sorties to clear flight deficiencies not to exceed those authorized by the Progress Review Process and/or the syllabus.
  - 4) Provide additional counseling as required. Additional counseling is done at the discretion of immediate supervisors, but is required if students fail to meet the CAP removal goals.
  - 5) Appropriately update any intermediate goals and CAP removal goals.
  - 6) Regularly brief squadron leadership on a student's progress toward CAP removal. This briefing should include student strong and weak areas and CAP removal criteria.
  - 7) Maintain documentation of all counseling in the student's training record. **Note:** Document sessions concerning sensitive personal problems on AF IMT 174, *Record of Individual, Counseling* or AETC Form 173 and retain in a separate student personal information folder (SPIF) maintained by the supervisor.
- 3) CAP Removal. The SQ/CC will remove students from CAP when the student meets CAP removal goals, demonstrates sustained normal progress, or resolves personal issues. **This authority will NOT be delegated.** Removal should not be strictly event/task/sortie/lesson based, particularly when individual weak areas can carry over into the next phase/block or module. Immediate supervisors will counsel students when they are removed from CAP.

#### 11. Progress Review Process (PR)

Conduct a PR when a student demonstrates significant substandard performance to evaluate factors affecting the student's performance and the student's potential to complete the training. Students will continue in training until their ability to complete the course comes into question. PRs will include a review of the student's training record; an interview with the student; and interviews with instructors, military training leaders, and supervisors (when appropriate). Document all PRs in the student's training record, or the electronic media equivalent. Consider placement on CAP.

**Note:** Once a student requires more training flights and/or additional training sorties than allowed by the syllabus (with the exceptions noted in paragraph 11.c.), commanders may consider eliminating the student IAW AFI 11-402, Chapter 4, "Failure to Meet Training Standards".

a. Level One (L1). The FLT/CC, Superintendent, or ATS Lead Instructor will review the student's training for the following reasons: 1) an exam failure, 2) first aircraft sortie or device failure, 3) consecutive aircraft sorties or device graded "Conditional", or 4) failure to attain Required Proficiency Level (RPL) for ground training.

- 1) The FLT/CC, Superintendent, or ATS Lead Instructor may; 1) continue student in training, 2) authorize additional ground training, or 3) direct a Level Two review to recommend additional sorties or device training, or to recommend elimination.
- b. Level Two (L2). The student's squadron commander (SQ/CC) will review the student's training for the following reasons: 1) second or subsequent exam failures, 2) second or subsequent aircraft sortie or device failures, 3) recurring failure to attain RPL ground training, or 4) an AFI 11-202, Vol. 2 evaluation failure.

**Note:** Exams include phase/block tests, end-of-course tests, and required flight evaluation requisite exams. Consecutive is defined as a repeat of the same phase/block or first attempt on any successive phase/block.

1) The commander may; 1) authorize additional sorties/devices IAW paragraph 13 of the syllabus, 2) authorize additional ground training, 3) direct an EC, 4) initiate the Commander's Review (CR) Process, or 5) direct a Level Three review if more sorties are required.

**Note:** During contractor-provided training, the TRS/CC or ATS Site Manager conducts the review. Once a student begins flight line training, the flying SQ/CC conducts the review.

- c. Level Three (L3). The Operations Group Commander (OG/CC) will review the students training for the following reasons: 1) SQ/CC recommendation for additional sorties, or 2) once the student exceeds the maximum number of sorties or hours allowed in the syllabus. (The intent is to raise the level of review when excessive assets are expended to meet training goals, regardless of the cause.) **Exceptions:** The extra sorties do not include sorties/simulators flown for support or to regain proficiency lost during BIT, EC, or incomplete sorties
  - 1) The OG/CC may; 1) authorize additional sorties IAW paragraph 13 of the syllabus, 2) deny additional sorties, or 3) request a 19 AF/DO waiver for additional sorties.

**Notes:** The OG/CC may reinstate student a second time with 19 AF/DO waiver approval for additional sorties. If the student subsequently fails during prescribed additional training sorties the SQ/CC should recommend elimination.

#### 12. Elimination Check (EC) Guidance

An EC is a unit commander's instrument to assess a student's overall flying skills and potential to meet syllabus and MAJCOM requirements. SQ/CCs should consider an EC for sustained substandard performance or doubtful potential to complete formal training. EC's are not intended to comply with AFI 11-202, Vol. 2 requirements, but to assess the student's ability to accept instruction and potential for course completion. Group evaluators will fly ECs.

- a. The overall mission grade for an EC will be "S" (satisfactory), "P" (proficient) or "U" (unsatisfactory). Students are allowed to repeat maneuvers and may be instructed in all areas. In all cases, the unsatisfactory sub-areas that precipitated the EC will be sampled. An EC for procedural knowledge will consist of a ground evaluation and may include an ATD mission(s). Use ATD Government Use Time (GUT). All ATD missions must be coordinated with the ATS contractor. The EC will be documented in the student's training record. Use "EC-01", as applicable, for the mission number.
  - 1) A satisfactory EC fulfills the requirements of the lesson/sortie that caused it to be accomplished and allows the student to continue training in the normal training syllabus flow at the next syllabus lesson/sortie. This check does not fulfill the requirements of an AFI 11-202, Vol. 2 evaluation.
- b. An unsatisfactory EC will result in entry into the Commander's Review (CR) Process.
- c. Training Device EC SQ/CCs may direct training device ECs any time student performance warrants consideration for elimination. An Air Force or contract instructor will conduct device ECs, while at the same time an evaluator will observe and decide whether the student should continue training. The student will meet CTS to continue training.
- d. Ground Evaluation EC EC ground evaluations may be conducted as a result of unsatisfactory general knowledge and (or) emergency procedures knowledge or for failure to meet syllabus standards in procedural knowledge. The ground evaluation is not a collaborative effort. In all cases, the evaluator will conduct the briefing, ground evaluation execution, debriefing, and assign the overall grade.
- e. Incomplete EC An EC is incomplete only if the mission tasks/events and objectives could not be completed, and a reasonable evaluation of student performance could not be made. Do not incomplete an aircraft EC for non-flying or ground items with a recommendation that additional ground lessons be administered by another qualified EC evaluator to determine the outcome of the EC.

#### 13. Authorized Additional Training (AT)

The SQ/CC may authorize up to 1 additional flightline sortie. The OG/CC may authorize up to 1 additional flightline sortie. Additional time/sorties (CPT, ATD, etc.) will be logged as AT time in the student's training record.

#### 14. Commander's Review (CR) Process

When students demonstrate a lack of potential to meet training standards, the squadron commander will recommend elimination. Use AETC Form 126A, *Record of Commander's Review Action*, to complete the CR process. For specific responsibilities and guidance on the AETC Form 126A, see Figure 2-1 for overview of process. **Note:** Complete the CR process within 10 duty days (24 duty days for international students) from the date the Initiating Authority (IA) signs AETC Form 126A.

#### 15. Commander's Review (CR) Process Specific Duties

1. Initiating Authority (IA). The student's SQ/CC is the IA, The IA will:

**Note:** During contractor-provided training, the TRS/CC conducts the CR. Once a student begins flight line training, the flying SQ/CC conducts the CR.

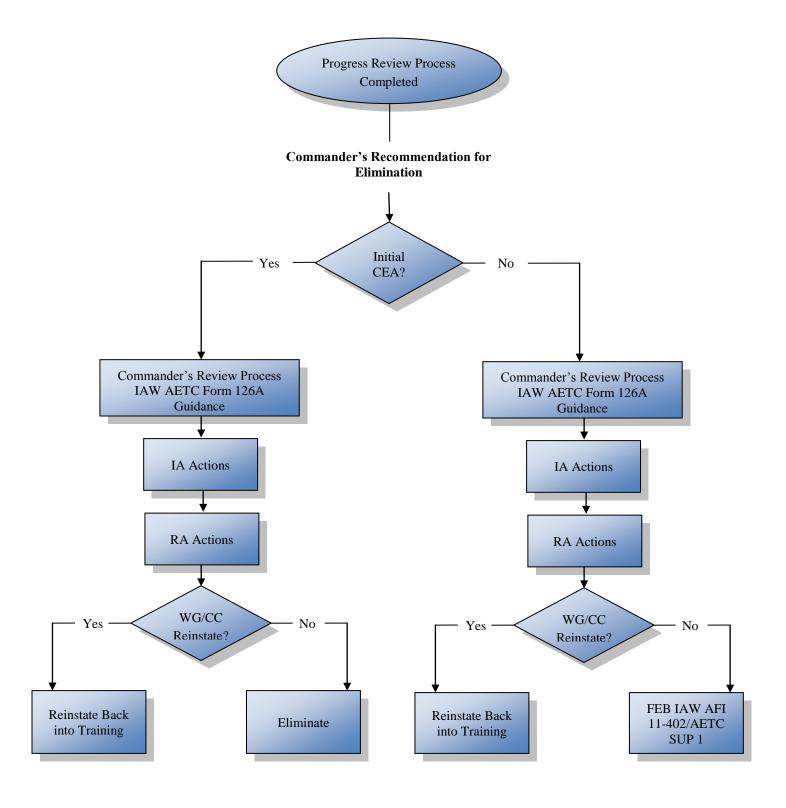
- a. Inform the student that the CR process is being initiated and state reasons for the action.
- b. Explain the CR process to the student.
- c. Remove the student from training pending the Approving Authority's (AA) decision. **Note:** The IA may elect to continue the student in academics only training with Reviewing Authority (RA) concurrence.
- d. Notify the HARM office to suspend the student's aeronautical orders IAW AFI 11-402/AETC SUP 1.
- e. Notify the student in writing of consideration for elimination.
- f. Inform the student of individual rights for legal assistance and representation.
- g. Advise the student to submit a letter within 2 duty days identifying any factors that may have affected training.
- h. Complete AETC Form 126A, Section I and clearly state the reason(s). Indicate whether the student is an Initial CEA or a Qualified CEA/Rated Officer.
- i. Ensure the student completes AETC Form 126A, Section II, and include the statement "I have discussed this action with the squadron commander."
- j. Forward the completed AETC Form 126A with the student's memorandum, training record, any attachments and written documentation (if applicable) to the RA no later than 4 duty days after notifying the student.
- 2. Reviewing Authority (RA). The OG/CC is the RA. The RA will:
  - a. Review the student's training and determine if any training irregularity would warrant retention in training. (**Note:** The OG/CC may delegate this review and recommendation authority to the operations group deputy commander). The RA will discuss the circumstances of the elimination with the IA. The RA may interview the student, as necessary.
    - 1) Complete AETC Form 126A, Section III, make comments (when applicable) as to the student's retention or elimination from training, and Section IV, if applicable, to include all evaluator results by lesson/sortie and overall grade.
    - 2) For medical eliminatees, provide a statement evaluating the student's ability to complete training if medically requalified.
    - 3) Forward the AETC Form 126A with all applicable records to the WG/CC for final review.
- 3. Approving Authority (AA). The WG/CC is the AA. The AA will:
  - a. Review the student's records and RA's comments.
  - b. Decide whether the student will be reinstated or eliminated from training.
    - 1) For Initial CEA students marking the "eliminate" block indicates the final decision on elimination and the student is permanently removed from the course.
      - i. Complete Section V of AETC Form 126A, annotating any recommendations of follow-on training for the student. The AA may also recommend lateral flow of enlisted initial CEA students to other aircraft or crew positions. The WG/CC ensures coordination of lateral training requirements through HQ AETC/A3ZM. Note: Do not recommend students eliminated for manifestation of apprehension (MOA) for any other flying training.

- ii. Upon elimination, inform the student of the opportunity to indicate personal desires for retention in service and future training according to AFI 36-2110, *Assignments*. Explain the possibility of reassignment action or release from extended active duty under the separation policies.
- 2) For Qualified CEA/Rated Officer students marking the "eliminate" block requires initiation of an FEB IAW AFI 11-402/AETC SUP 1.

#### 16. Fuel Conservation

Aircrews will manage aviation fuel as a limited commodity and precious resource. Consider fuel optimization throughout all phases of mission planning and execution of this syllabus. Optimize ground operations and flight profiles for efficient fuel usage. Adhere closely to syllabus average mission durations. Terminate the sortie early when mission and training objectives are met. Carefully weigh the cost/benefit of AT sorties.

Figure 2-1 — Overview of Commander's Review Process



## Section C — Grading Procedures

#### 1. Performance and Knowledge Standards

Measure student performance and knowledge against the CTS and the RPL. These standards and proficiency levels are drawn from the MTL/ESD and AFI 11-2KC-135, Vol. 2. The RPL is the minimum level the student must accomplish as per the MIF. A performance code value will have a knowledge code associated for each specific task/event or sortie/lesson (Example: 2B or 3C). Knowledge codes can be used alone to define a level of knowledge for a subject not directly related to any specific task/event (Example B or C), or for a subject common to several tasks/events.

a. Event/Task or Lesson/Sortie Performance Standard

Code	Performance is	Definition
1	Extremely Limited	Individual can do most activities only after being told or shown how.
2	Partially Proficient	Individual can do most of the behaviors, but not necessarily to the desired levels of speed, accuracy, and safety.
3	Proficient	Individual can do and show others how to do the behavior in an activity at the minimum acceptable levels of speed, accuracy, and safety without the assistance of an instructor. For PIQs, proficiency may involve actual airplane control or copilot duties. For instructors, proficiency includes the ability to demonstrate, instruct, and supervise ground and flight activity.
4	Highly Proficient	Individual can do behaviors in an activity at the highest level of speed, accuracy and safety.

b. Event/Task or Lesson/Sortie Knowledge Standard

Code	Knowledge of	Definition
A	Fact and	Individual can identify basic facts and terms about the subject and, when
	Nomenclature	used with a performance code, can state nomenclature, simple facts, or procedures involved in an activity.
В	Principles and	Individual can explain relationship of basic facts and state general principles
	Procedures	about the subject and, when used with a performance code, can determine step-by-step procedures for sets of activities.
C	Analysis and	Individual can analyze facts and principles and draw conclusions about the
	Operating Principles	subject and, when used with a performance code, can describe why and when each activity must be done and tell others how to accomplish activities.
D	Evaluation and	Individual can evaluate conditions and create new rules or concepts about
	Complete Theory	the subject and, when used with a performance code, can inspect, weigh, and design solutions related to the theory involved with activities.

#### 2. Individual Task Grading

Each task will be graded using the following scale:

- a. One Time(O) Item must be accomplished once by the crewmember, but does not require proficiency.
- b. Briefing Only (B) Briefing Item Only.
- c. Familiarization (F) May be accomplished by briefing, demonstration, observation or actual accomplishment.
- d. *Proficient (P) Individual has achieved the required proficiency level (as per the MIF table).*
- e. Satisfactory (S) Individual has not achieved the required proficiency level (RPL) but progress is Satisfactory.
- f. Unsatisfactory(U) Individual was previously proficient, but has regressed or progress is Unsatisfactory.

#### **Notes:**

1. Once an individual has received a "P" for a task, the only subsequent grade allowed is either "P" or "U".

- 2. Any task/event graded "U" must have an associated remark the student's training record.
- 3. Follow AFI 11-2KC-135, Vol. 1 for guidance in completing training records.

#### 3. Overall Lesson/Event/Sortie Grade

After grading individual tasks, the instructor will rate the student's overall performance. The overall grade scale is as follows:

- a. Unsatisfactory(U) Unsatisfactory progress on this lesson/event/sortie.
- b. Conditional(C) Marginal progress on this less/event/sortie.
- c. Good(G) Normal progression on this lesson/event/sortie.
- d. Excellent(E) Exceptional progression on this lesson/event/sortie.

#### **Notes:**

- 1. Students graded "U" on any individual task should not receive any higher overall grade than conditional (C). However, an overall Good or Excellent may be appropriate when an individual grade of "U" is given for maneuvers new to the student. A student's performance is expected to improve during training and lack of progression will be reflected in the overall grade.
- 2. Follow AFI 11-2KC-135, Vol. 1 for guidance in completing training records.

#### 4. Maneuver Item File (MIF)

Students will be graded on all items listed in the MIF table unless exceptions are noted in the training record. The RPL a student must attain per each MIF is listed below.

- a. CFT Maneuver Item File—An RPL of 2 will be attained by the last CFT event unless otherwise noted.
- b. OFT Maneuver Item File—An RPL of 3 will be attained on all items by the OFT prior to the evaluation event unless otherwise noted.
- c. Airplane Maneuver Item File—An RPL of 3 will be attained on all items by the flight prior to the evaluation event unless otherwise noted.

## **Section D** — Course Training Standards (CTS)

1. Purpose — To provide individual task/event standards to meet lead command's graduate requirements.

#### 2. Duties and Responsibilities

- Student Responsibilities Students will accomplish all assigned training.
- b. Instructor Responsibilities Instructors are ultimately responsible for accomplishment of all preflight, postflight, and training requirements.

### 3. General Proficiency Standards

- a. Course training standards equate to a proficiency maneuver grade of "3C" for task/event performance or "C" for task/event knowledge unless otherwise stated. The student must attain this standard not later than completion of the sortie prior to the evaluation (flight or simulator).
- b. Procedural knowledge and application must be in accordance with applicable and current directives to allow safe and efficient mission accomplishment.
- Momentary deviations are acceptable if timely corrections are made and safety of flight is not compromised.
- d. The CTS listed in the MIF tables correspond to the grading criteria areas in the AFI 11-2KC-135, Vol. 2 except those which are unique to each course and have a higher series number above those associated with the Vol. 2 areas or sub-areas. Should a variance occur between the CTS and the "source" regulation (AFI 11-2KC-135, Vol. 2), the source regulation takes precedence.

#### 4. Employment

The MIF identifies required student progression necessary for successful unit completion. Prior to course completion, each student must pass an AFI 11-202, Vol. 2 evaluation which fulfills AFI 11-2KC-135, Vol. 2 qualification requirements.

#### 5. Job Tasks

Performance conditions are specified in the following CTS table. Standards are located in AFI 11-2KC-135, Vol. 2. For additional standards not addressed in 11-2KC-135, Vol. 2, see appended tables below.

Area (CTS)	Description
	General
1	Directives and Publications
2	Mission Preparation/Planning/Performance
3	Use of Checklist
4	Safety Consciousness (Critical)
5	Judgment/Compliance (Critical)
6	Crew Coordination/Crew Resource Management (CRM)
7	Communication Procedures
8	Aircrew Flight Equipment Systems/Egress
9	Knowledge/Completion of Forms
10	Airmanship/Situational Awareness
1.1	Qualification
11	Takeoff  VER Pottom (Weather Pompitting on Contified Simulator)
13	VFR Pattern (Weather Permitting or Certified Simulator)
13A	Landings Normal Landing (50 Flap)
13A 13B	Partial Flap (30 or 40 Flap)
14	Landing/Roll, Braking
15	All Engine Go Around (GA), Copilots Only
16	Simulated Engine Out Operations
16A	Engine Fire/Failure During Flight
16B	Engine Out Approach
16C	Engine Out GA
16D	Engine Out Landing (use area 16 criteria)
17	Boldface Emergency Procedures (Critical)
18	Other Emergency Procedures
19	Systems Operations/Knowledge/Limitations
20	Instrument
20	Instrument Departure/SID
21 22	En Route Navigation/FMS Holding (If available, else verbally evaluate)
23	Use of NAVAIDs
24	Descent/Arrival
25	Precision Approaches
25A	PAR
25B	ILS
26	Non Precision Approaches
27	Circling Approach (If Available, Else Verbally Evaluate)
28	Missed approach
	Mission
30	Ground Operations/Taxi
31	Takeoff
32	Radar Operations/Weather Avoidance/Windshear
33	Fuel Conservation
34	Landing
35	Tanker AAR
35A	Rendezvous  Platform Control
35B 35C	Platform Control  Brookeyey
35D	Breakaway Overrun Procedures
35E	Tanker AAR formation, if observed
36	Formation (if observed)
38	Tactics (if observed)
50	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

39	Threat Avoidance (if observed)
40	Tactical Arrival (if observed)

# Chapter 3 Academic Training

CBES-Computer-Based Exam System FT-Field Trip

CBT-Computer-Based Training IBT-Instructor-Based Training

## Section A — Course Content/Medium/Duration

CFT-Cockpit Familiarization Trainer

## **PREPARATORY**

PTT-Part Task Trainer

Lesson ID	Title	Medium	Hours
IRC	Instrument Refresher Course *	IBT	6.0
KPAO1	Flight Characteristics	CBT	1.0
KPAO2	Flight Handling	CBT	1.0
KPAO3	Asymmetrical Aerodynamics	CBT	1.0
KPDE	Associated Directives for KC-135 Operations	CBT	1.0
KPDI	Associated Directives Seminar	IBT	2.0
KPFT	Aircraft Field Trip	FT	1.5
KPIP1	FSSC Inprocessing and LRC Orientation	IBT	1.5
KPIP2	AF Inprocessing *	IBT	1.5
KPPM1	Publications Assembly	IBT	4.0
KPPM2	Publications Page Count	IBT	3.0
KAPM	Publications Maintenance and Associated Directives	CBT	1.0
INTRO	Introduction to CBT	CBT	0.5
KPSD	Systems Associated Directives	CBT	1.0
			26.0
	CNS/ATM		
KPCD	CNS/ATM Datalinking	CBT	1.5
KPGT1	IHC and IMFD Menu (GIPTT Exercise)	PTT	1.0
KPGT2	Map Displays (GIPTT Exercise)	PTT	1.0
KPGT3	Advanced Operations (GIPTT Exercise)	PTT	1.0
KPOP	CNS/ATM Operations	IBT	3.0
KXCA	CNS/ATM Orientation	CBT	2.5
KXCI	IHC and IMFD Menu	CBT	2.0
KXCN	CNS/ATM Navigation Systems	CBT	1.5
KXCS	CNS/ATM Surveillance Systems	CBT	1.5
			15.0

**15.0** 

## FLIGHT MANAGEMENT SYSTEMS

Lesson ID	Title	Medium	Hours
KPCB	Flight Management System Review	IBT	2.5
KPCB1	FMS: COM and NAV Keys	CBT	1.0
KPCB2	FMS: MSN and Data Keys	CBT	1.0
KPCM	Multifunction Display (MFD) for Pilots	CBT	2.5
KPFM1	Fuel Savings Advisory System Basics	CBT	1.0
KPFM2	Fuel Savings Advisory System Performance	CBT	1.0
KPFM3	ATD Exercise for FSAS	CFT	1.0
KPGP	EGPWS	CBT	1.5
KPTC	ETCAS	CBT	2.0
KXCB1	FMS: Control Display Unit Basics	CBT	1.5
KXCB2	FMS: FPLN and DIR Keys	CBT	1.0
KXCB3	FMS: EDIT Key	CBT	2.0
KXCB4	FMS: STR, PSN, IFF/M3 and MARK Keys	CBT	1.0
KXCB5	FMS: IDX Key	CBT	1.0
KXCB6	FMS: INAV and STAT Keys	CBT	1.0
KXCR	Color Radar for Pilots and Navigators	CBT	1.5
			22.5
	AIRCRAFT SYSTEMS		
KAIM	ADIS	CBT	1.0
KPAA	Miscellaneous Flight Instruments	CBT	1.0
KPAP	Autopilot	CBT	1.0
KPAU	Auxiliary Power Unit	IBT/PTT	1.0
KPAU	Auxiliary Power Unit	CBT	1.0
KPEL1	Electric Systems	CBT	1.0
KPEL2	Electric Systems Operations	CBT	1.0
KPEN1	Engine Systems	CBT	1.5
KPEN2	Engine Malfunctions	CBT	2.0
KPFC1	Primary Flight Controls	CBT	1.5
KPFC2	Secondary Flight Controls and Emergency Procedures	CBT	1.5
KPFD	Flight Director	CBT	1.0
KPFU	Fuel System	CBT	1.5
KPFU1	Fuel System Operation	CBT	1.0
KPHY	Hydraulic System	CBT	2.5
KPLT	Navigation Safety Equipment	CBT	1.0
KPOX	Oxygen System	CBT	1.0
KPPN1	Pneumatic System Location and Function	CBT	1.0
KPPN2	Pneumatic System Procedures	CBT	1.0
KPRA1	AN/ARC-164 UHF	CBT	0.5
KXRA	AN/ARC-210 VHF/UHF Radio	CBT	2.0
			26.0

26.0

## MISSION PLANNING

	MISSION PLANNING		
Lesson ID	Title	Medium	Hours
KPCF	Formation Flying	IBT	2.0
KPDM	Associated Directives for Mission Planning	CBT	1.0
KPFP	Mission Planning	CBT	1.0
KPFP	PFPS Mission Planning	IBT	12.0
KPMP	FSAS Calculator Exercises	PTT	1.0
KPMP1	Takeoff Data 1	CBT	1.0
KPMP2	Takeoff Data 2	CBT	1.0
KPMP3	Takeoff Data 3	CBT	1.5
KPMP4	Takeoff Data 4	CBT	1.5
KPMP5	Landing Data	CBT	1.0
KPMP6	FSAS Calculator Lab	IBT/PTT	3.5
KPPF	DAFIF Data Loading Procedures	CBT	0.5
			27.0
	AIR REFUELING		
KPDA	Associated Directives for Air Refueling	CBT	1.0
KAAR	Air Refueling Basics	CBT	1.0
KYAR2	Air Refueling Aerodynamics	CBT	1.0
KPAR1	Air Refueling Operations	IBT/PTT	3.0
KPAR2	Air Refueling Seminar	IBT	1.0
			7.0
	OPERATIONS		
CRM	Crew Resource Management (CRM)	IBT	8.0
IRCHT	Hot Topics*	IBT	2.0
KPGW	Gusts and Windshear	IBT	2.0
КРЈР	Jeppesen Approach Plate Study	CBT	1.5
KPTU	Turns During Climbout	CBT	1.0
KPVF	VFR Arrival and Departure	CBT	1.0
KPVR	National Airspace and VFR	CBT	1.5
	•		17.0
	CFT/ATD/OFT GUIDED DISCUSSI	ONS	
Lesson ID	Title	Medium	Hours
KPAD1GD	Hydraulic System	IBT	2.0
KPAD2GD	Engines System	IBT	2.0
KPAD3GD	Electric System and Autopilot	IBT	2.0
KPAD4GD	Fuel System	IBT	2.0
KPAD5GD	Pneumatic System and APU	IBT	2.0
KPAD6GD	Flight Controls and Aerodynamics	IBT	2.0
KPAD7GD	Flight Director, ADIS, O2, ELT, 164/210 Radios	IBT	2.0
KPAD8GD	CNS/ATM Display/COM/NAV/SATCOM	IBT	2.0
KPAD9GD	CNS/ATM Nav and Surveillance Systems	IBT	2.0
M MD/OD	Cho/11111 that and but remance bysicing	101	2.0

KPAD10GD	CNS/ATM Datalinking	IBT	2.0
KPAD11GD	Color Radar, ETCAS, EGPWS	IBT	2.0
KPNM1	Normal Procedures 1	CFT	3.0
KPNM2	Normal Procedures 2	CFT	3.0
KPNM3	Normal Procedures 3	CFT	2.5
KPNM4	Normal Procedures 4	CFT	2.0
KPMD01-02MS	Ground Movement and Takeoff Procedures	IBT	2.0
KPMD03-04MS	Full Stop and Touch-and-Go Landing Procedures	IBT	2.0
KPMD05-06MS	Patterns and Approaches	IBT	2.0
KPMD07 MS	Aerodynamics	IBT	2.0
KPMD08-09 MS	Normal Procedures, Including A/R	IBT	2.0
KPMD10 MS	Engines	IBT	2.0
KPMD11 MS	Fuels	IBT	2.0
KPMD12 MS	Datalink Scenario #3	IBT	2.0
KPMD14 MS	Hydraulics	IBT	2.0
KPMD15 MS	Electrics	IBT	2.0
KPMD16 MS	Datalink Scenario	IBT	2.0
KPMD18 MS	Flight Controls	IBT	2.0
KPMD19 MS	Pneumatics	IBT	2.0
KPMD20 MS	Datalink Scenario #9	IBT	2.0
11D1 (D 04 1 1 0	Datalink Scenario #7	IBT	2.0
KPMD21 MS	Datannik Scenario #/	101	
KPMD21 MS KPMD22 MS	Proficiency Training	IBT	2.0
KPMD22 MS	Proficiency Training	IBT	2.0
KPMD22 MS	Proficiency Training	IBT	2.0 2.0
KPMD22 MS	Proficiency Training Prep for Checkride	IBT	2.0 2.0
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KPMD22 MS KPMD23 MS	Proficiency Training Prep for Checkride  EMERGENCY PROCEDURES Emergency Procedures	IBT IBT	2.0 2.0 <b>66.5</b> 7.0
KPMD22 MS KPMD23 MS KPEP	Proficiency Training Prep for Checkride  EMERGENCY PROCEDURES Emergency Procedures  EXAMINATIONS	IBT IBT	2.0 2.0 66.5 7.0 7.0
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KPMD22 MS KPMD23 MS  KPEP  KPBAX KPBBX KPBCX KPBDX KPBFX	Proficiency Training Prep for Checkride  EMERGENCY PROCEDURES Emergency Procedures  EXAMINATIONS  Block A Exam Block B Exam Block C Exam Block D Exam Boldface Emergency Procedures Test	IBT IBT  IBT  CBES CBES CBES CBES CBES IBT	2.0 2.0 66.5 7.0 7.0 1.0 1.0 1.0 0.5
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KPMD22 MS KPMD23 MS  KPEP  KPBAX KPBBX KPBCX KPBDX KPBFX KPEPX KPECX	Proficiency Training Prep for Checkride  EMERGENCY PROCEDURES  Emergency Procedures  EXAMINATIONS  Block A Exam  Block B Exam  Block C Exam  Block D Exam  Boldface Emergency Procedures Test  Emergency Procedures Exam  End-of-Course Test	IBT IBT  IBT  CBES CBES CBES CBES IBT CBES CBES CBES	2.0 2.0 66.5 7.0 7.0 1.0 1.0 1.0 0.5 1.0 1.0
KPMD22 MS KPMD23 MS  KPEP  KPBAX KPBBX KPBCX KPBDX KPBFX KPEPX KPECX	Proficiency Training Prep for Checkride  EMERGENCY PROCEDURES  Emergency Procedures  EXAMINATIONS  Block A Exam Block B Exam Block C Exam Block D Exam Boldface Emergency Procedures Test Emergency Procedures Exam End-of-Course Test Aircraft Marshalling Examination (G002A/G002B)	IBT IBT  IBT  IBT  CBES  CBES  CBES  CBES  IBT  CBES  CBES  CBES  CBES  CBES	2.0 2.0 66.5 7.0 7.0 1.0 1.0 1.0 0.5 1.0 0.5
KPMD22 MS KPMD23 MS  KPEP  KPBAX KPBBX KPBCX KPBDX KPBFX KPEPX KPECX KAMRX	Proficiency Training Prep for Checkride  EMERGENCY PROCEDURES  Emergency Procedures  EXAMINATIONS  Block A Exam  Block B Exam  Block C Exam  Block D Exam  Boldface Emergency Procedures Test  Emergency Procedures Exam  End-of-Course Test  Aircraft Marshalling Examination (G002A/G002B)  IRC Test*	IBT IBT  IBT  IBT  CBES CBES CBES CBES IBT CBES CBES CBES CBES IBT	2.0 2.0 66.5 7.0 7.0 1.0 1.0 1.0 0.5 1.0 0.5 1.0 2.0
KPMD22 MS KPMD23 MS  KPEP  KPBAX KPBBX KPBCX KPBDX KPBFX KPEPX KPECX KAMRX	Proficiency Training Prep for Checkride  EMERGENCY PROCEDURES  Emergency Procedures  EXAMINATIONS  Block A Exam Block B Exam Block C Exam Block D Exam Boldface Emergency Procedures Test Emergency Procedures Exam End-of-Course Test Aircraft Marshalling Examination (G002A/G002B) IRC Test* Datalink Certification Exam	IBT IBT  IBT  IBT  CBES CBES CBES CBES IBT CBES CBES CBES IBT CBES CBES CBES	2.0 2.0 66.5 7.0 7.0 1.0 1.0 1.0 0.5 1.0 0.5 1.0
KPMD22 MS KPMD23 MS  KPEP  KPBAX KPBBX KPBCX KPBDX KPBFX KPEPX KPECX KAMRX	Proficiency Training Prep for Checkride  EMERGENCY PROCEDURES  Emergency Procedures  EXAMINATIONS  Block A Exam  Block B Exam  Block C Exam  Block D Exam  Boldface Emergency Procedures Test  Emergency Procedures Exam  End-of-Course Test  Aircraft Marshalling Examination (G002A/G002B)  IRC Test*	IBT IBT  IBT  IBT  CBES CBES CBES CBES IBT CBES CBES CBES IBT CBES CBES CBES	2.0 2.0 66.5 7.0 7.0 1.0 1.0 1.0 0.5 1.0 0.5 1.0 2.0

20			
LL04/06	Aircrew Flight Equipment*	IBT	4.0
G060	Tactics (taught by flightline, does not include unit specific events, 4 hours included in mission prep)*	IBT	4.0
G070	Aircrew Intelligence Training (AIT)*	IBT	4.0

MISSION QUALIFICATION GROUND TRAINING

16.0

17.8

Lesson ID	Title	Medium	Hours
G080A	AFSIR	CBT	0.5
G080C	Identification, Friend or Foe System	CBT	0.5
G080D	COMSEC User Requirements	CBT	1.0
G080E	HAVE QUICK with AN/ARC-164	CBT	0.5
G080F	KY-58 Secure Voice	CBT	0.5
G080G	ACS with HF1 Backup Control Panel	CBT	1.0
G080H	ACS with CDU	CBT	1.0
G080I	Simple Key Loader	CBT	0.5
G080J	Have Quick with CDU	CBT	0.5
G090	Antihijacking	CBT	0.5
G110	Level 1 AntiTerrorism (AT) Awareness Training	CBT	1.0
G140	RVSM	CBT	1.0
G182	Hazardous Cargo	CBT	2.5
G190R	Aircraft Servicing	CBT	1.0
Hxxx	Immunizations (Update shots as needed)*		1.0
VT01	VTRAT Training	IBT	4.8

\*Taught by A.F.

## Section B — Cockpit Familiarization Training (CFT) Maneuver Item File

The CFTs provide the student the opportunity to become familiar with the location of instruments and switches and to practice performing checklists before flying in the OFT.

CTS No.	CFT MANEUVER ITEM	Left Seat	Non-Seat Specific	Right Seat
3	Interior Inspection Checklist	2B		2B
3	Starting Engines and Before Taxi Checklist	2B		2B
3	Taxi Checklist	2B		2B
3	Before Takeoff Checklist	2B		2B
3	After Takeoff-Climb Checklist	2B		2B
3	Descent Checklist	2B		2B
3	Approach and Landing Checklist	2B		2B
3	After Landing Checklist	2B		2B
3	Engine Shutdown or Postflight Checklists	2B		2B
6	Crew Coordination/CRM	2B		2B

## Section C — Aircrew Training Device (ATD) Maneuver Item File

The ATD/operational flight trainer provides the student the opportunity to practice performing checklists and hone their skills before flying in the OFT.

Note: KPNM5 and 6 MIF information

CTS No.	ATD MANEUVER ITEM	Left Seat	Non-Seat Specific	Right Seat
3	Interior Inspection Checklist		2B	
3	Starting Engines and Before Taxi Checklist		2B	
3	Taxi Checklist		2B	
3	Before Takeoff Checklist		2B	
3	After Takeoff-Climb Checklist		2B	
3	Descent Checklist		2B	
3	Approach and Landing Checklist		2B	
3	After Landing Checklist		2B	
3	Preparation for Air Refueling Checklist		2B	
3	Post Air Refueling Checklist		2B	
3	Multiple Full-Stop Landings Checklist		2B	
3	Engines Running Pushback Checklist		2B	
3	Engine Shutdown Checklist		2B	

# **Chapter 4 Flying Training**

Accomplish all Operational Flight Trainer (OFT) and airplane missions IAW the KC-135 OFT Pilot Training Devices Instructor Guide and Flightline Procedures Instructor Guide.

## **Section A** — **Simulator Training**

Unit	Medium	Title	Sorties	Hours
KPMD01	OFT	Ground Movement/Takeoff Procedures	1	4.0
KPMD02	OFT	Ground Movement/Takeoff Procedures	1	4.0
KPMD03	OFT	Departure, Arrival, Landing Procedures	1	4.0
KPMD04	OFT	Departure, Arrival, Landing Procedures	1	4.0
KPMD05	OFT	Patterns and Approaches	1	4.0
KPMD06	OFT	Patterns and Approaches	1	4.0
KPMD07	OFT	Aerodynamics	1	4.0
KPMD08	OFT	Engines	1	4.0
KPMD09	OFT	Normal Procedures and A/R Mission	1	4.0
KPMD10	OFT	Normal Procedures and A/R Mission	1	4.0
KPMD11	OFT	Fuels; Point Parallel C-5	1	4.0
KPMD12	OFT	Mildenhall to Ramstein, Anchor F-15s	1	4.0
KPMD13	OFT	M010, Pilot Proficiency	1	4.0
KPMD14	OFT	Hydraulics; Point ParallelB-52	1	4.0
KPMD15	OFT	Electrics; Anchor F-18s (Navy-Drogue)	1	4.0
KPMD16	OFT	Auckland to Brisbane, Enroute C-17	1	4.0
KPMP17	OFT	M010, Pilot Proficiency	1	4.0
KPMD18	OFT	Flight Controls; Two Flights of F-16s	1	4.0
KPMD19	OFT	Pneumatics; MOA (CGI), A-10s	1	4.0
KPMD20	OFT	Diego Garcia to Fujairah, CRM (Heavyweight Return)	1	4.0
KPMD21	OFT	Eielson to Yokota, Enroute C-17	1	4.0
KPMD22	OFT	Keflavik to Mildenhall, Enroute C-130	1	4.0
KPMD23	OFT	M010, Pilot Proficiency	1	4.0
KPMD24	OFT	Instrument/Qualification Evaluation	1	4.0
Flightline OFT	OFT	Flightline OFT	<u>1</u>	<u>3.0</u>
		Total	25	99.0

#### **Notes:**

- 1. The final sortie (KPMD24) will be flown as an instrument qualification evaluation IAW AFI 11-2KC-135, Vol. 2.
- 2. The normal composition of a training crew is a ratio of 2 pilots to 1 instructor. Any deviation from this ratio during academic training will be documented (to include hours in the seat to meet syllabus requirements) in the student training record.
- 3. Pilots will be exposed to formation training events in the aircraft as a primary means of training. ATDs joined together through Distributed Mission Training (DMT) are used for Tactical Air Work events (i.e. formation rejoins). DMT formation ATD events are creditable toward MQT. Goal is for each student pilot to receive 2 creditable formation experiences (simulator followed by flight training).
- 4. Flightline OFT will be instructed by AF instructors.

5. Flightline is responsible for coordinating with the contractor for OFT scheduling. If the OFT needs to be rescheduled, contractor will be given 24-hour notice of change.

## Section B — Airplane Training

Syllabus airplane sorties will normally be scheduled to provide a 1 hour prebrief, 4 hour mission planning, 3 hour preflight, varying sortie length, 1 hour crew debrief, and 2 hours for flight debrief (all of which may be completed on a different day than the flight). All debriefs will be complete prior to the next sortie. The evaluation sortie prebrief time is used for the Emergency Procedures Evaluation. Four hours are additionally added for Tactics ground training/briefing.

Unit	Medium	Title	Sorties	Hours
KPIB1	KC135	AAR & PTO (Day)	1	6.0
KPIB2	KC135	Pattern Only	1	3.0
KPIB3	KC135	AAR & PTO (Night)	1	6.0
KPIB4	KC135	AAR & Formation	1	5.5
KPIB5	KC135	AAR & PTO	1	5.5
KPIB6	KC135	AAR & PTO (Checkride)	<u>1</u>	<u>4.5</u>
		Total	6	30.5

#### **Notes:**

- 1. LL04/06 Aircrew Flight Equipment, LL03 Emergency Egress, and G025 Aircraft Field Trip must be completed prior to KPIB1.
- 2. Wing tip clearance training must be completed on or before KPIB1.
- 3. Students should be recommended for an evaluation as soon as they are proficient in all appropriate sub areas of MIF.
- 4. The final sortie (KPIB6) will be flown as a mission evaluation IAW AFI 11-2KC-135, Vol. 2. Stan/Eval determines the profile.
- Pattern only sortie must be accomplished during the flightline phase after the first aircraft sortie and before the recommend ride.
- 6. Tactics in KPIB 1-6 are pattern tactical operations (PTO), not MOA tactics.

## Section C — Operational Flight Trainer (OFT) Maneuver Item File

CTS No.	OFT MANEUVER ITEM KPMD 1-24	Left Seat	Non- Seat Specific	Right Seat
	GENERAL			
3, 19	Normal Procedures	3C		3C
3, 19	Cold WX Procedures		3C	
7	SATCOM Operations		3C	
7	Datalink Operations		3C	
	CREW RESOURCE MANAGEMENT (CRM)			
10	Situational Awareness/Airmanship		3C	
6	Crew Coordination/Flight Integrity		2B	
6,7	Communication		3C	
5,6	Risk Management/Decision Making		3B	
6	Task Management		2B	
1,2,4,5	Mission Planning		3C	
2	Mission Briefing/Debriefing		2B	
	ENGINE START/ TAXI			
30	Starting Engines	3C		3C
30	Alert Start		3C	
30	Taxiing the Aircraft	2C		
	TAKEOFF/CLIMB/CRUISE/DESCENT			
2	Takeoff Data Defns and Calculations		3C	
11	Normal Takeoff Procedures	3C		3C

CTS No.	OFT MANEUVER ITEM KPMD 1-24	Left Seat	Non- Seat Specific	Right Seat
11	ACCL Mode Takeoff		3C	
11	Max Mode Takeoff		3C	
11	Close-In Turns (Noise Abatement) Hvy Weight		3C	
11 16A	Engine Failure, Takeoff Continued		3C	
11, 32	Takeoff Weather Knowledge/Avoidance		3C	
20	Standard Instrument Departure/Climb out		3C	
20, 21	Enroute Climb		3C	
21,23	VOR/TAC/FMS Procedures		3C	
19, 33	Fuel Management/CG Control		3C	
3,19	INU Airborne Alignment		3C	
19,21	Course Deviation/Offset		3C	
3, 19	INS Steering Solution Update		3C	
5, 21	Monitor and Adjust Flight Progress		3C	
24	Enroute Descent		3C	
	AIR REFUELING (A/R)			
3, 35	Air Refueling Checklists		3C	
35, 35B	Tanker A/R Autopilot ON		2B	
35, 35B	Tanker A/R Autopilot OFF		2B	
35, 35A	Tanker RV Delta (Point Parallel)		3C	
35, 35A	Tanker RV Golf (En-route)		3C	
35, 35A	Anchor Rendezvous		3C	
35, 35A	Alternate/Backup Rendezvous		2C	
3, 5, 18	Reverse Air Refueling		F	
35,35D	Tanker Overrun Procedures		3C	
35,35C	Tanker A/R Breakaway Procedures		3C	
	APPROACH			
25,26	Approach	3C		3C
25A	PAR		2B	
25B	ILS		3C	
26	FMS Approach		F	
26	ASR		2B	
26	VOR/TAC/LOC Approach		3C	
24	High Altitude Procedures		3C	
24	Low Altitude Procedures		3C	
25, 26	ICAO Approach		3C	
19,25	Autopilot Coupled Approach		3C	
25B	ILS (Gyro Mode)		3C	
12	Visual Approach		3C	
12	VFR Pattern		3B	
27	Circling Approach		3C	
38,40	Overhead Pattern		F	
15,28	Go-Around/Missed Approach		3C	
6B,16C,28	Approach and Go-Around Engine Out		3C	
16B,16C,18,	Approach Engine Out/Rudder Power Off		3C	
28				
22	Holding		3C	
	LANDING			
2	Landing Data Definitions and Calculations		3C	
13, 13A	Landing 50 Flap	3C		3C
13,13B	Landing 30 or 40 Flap		3C	
13	Touch and Go Landing		3C	
13	Crosswind Landing		2C	

CTS No.	OFT MANEUVER ITEM KPMD 1-24	Left Seat	Non- Seat Specific	Right Seat
13	Night Landing		3C	
13,16D	Engine Out Landing		3C	
13	Full Stop Landing	3C		
14	Right Seat Braking Exercise			2B
5, 13,14,18,19	Landing with Antiskid Inoperative		3C	
	BOLDFACE/EMERGENCY PROCEDURES			
17	Abort	3C		3C
17	Engine Fire on the Ground	3C		3C
17	Engine Fire or Failure During Flight		3C	
17	Crash Landing Immediately After Takeoff	2C		2C
17	Unscheduled Rudder Deflection		3C	
17	Smoke/Fumes Elimination (Electrical Fire Isolation/Bleed Air System Isolation)		3C	
18	Runaway Stab Trim (NU) During Takeoff		3C	
18	Runaway Stab Trim (ND) During Approach		3C	
18,32	Windshear Recognition and Recovery		3C	
17,18	Starting Malfunctions		3C	
11,18	PMC Inoperative Takeoff		3B	
18	Fuel Dumping Procedures		3C	
18	Emergency Descent		3C	
18,19	Manual Flaps		3C	
18,19	Alternate Gear Extension		3C	
18	Precautionary Engine Shutdown		3C	
18,19	Jammed Stabilizer		О	
18	High Altitude Approach to Stall		F	
18	Low Altitude Approach to Stall		3C	
18	High Speed Buffet		F	
18,19	Unusual Attitude Recovery		3C	
18,19	Dutch Roll Recovery		F	
18,19,32	Adverse Weather Penetration		3C	
18,19	Spoiler and Lateral Control Demo		F	
18,19	Trim Demo		F	
19	Engine		3C	
19	Fuel		3C	
19	Hydraulic		3C	
19	Electric		3C	
19	Flight Control		3C	
19	Pneumatic System		3C	

## $Section \ D - Airplane \ Maneuver \ Item \ File \ (MIF)$

CTS No.	AIRPLANE MANEUVER ITEM	Left Seat	Non-Seat Specific	Right Seat
	GENERAL			
1	Directives and Publications		3C	
3	Use of Checklist		3C	
1, 3, 5, 6, 19	Aircraft Equipment Operations		3C	
4	Safety Consciousness		3C	
5	Judgment/Compliance		3C	
7	Communication Procedures		3C	
8	Aircrew Flight Equipment Systems/Egress		3C	
19	Systems Operations/Knowledge/Limitations		3C	
9	Knowledge/Completion of Forms		3C	
	CREW RESOURCE MANAGEMENT (CRM)			
6,10	Situational Awareness/Airmanship		3C	
6,7	Communication		3C	
5,6	Decision Making		3C	
6	Task Management		3C	
2,6	Mission Planning		3C	
2,6	Mission Briefing/Debriefing		3C	
6	Crew Coordination/Flight Integrity		3C	
	GROUND OPERATIONS			
3, 30	APU Operations		3B	
3,7,19,30	Preflight/Ground Ops		3C	
7	Have Quick Radio Procedures		3C	
7	Secure Radio Operations		2B	
7	Authentication Procedures		2B	
7	SATCOM Communication		3C	
7	NDB & AAR DB load ops		F	
7	HF SELCAL		F	
30	Taxi	3C		
3,9,19, 30	Postflight	3C		
	TAKEOFF/DEPARTURE			
11,36	Formation Departure & Join-Up		2B	
11	Takeoff-Night		3C	
3,7, 19	PNF Climb Duties		3C	
12	VFR Departure (Day)		3C	
12	VFR Departure (Night)		3C	
	AIR REFUELING (A/R)			
35,35B	Tanker A/R Autopilot ON		3C	
35,35B	Tanker A/R Autopilot Off		3C	

35,35A	Tanker Rendezvous	3C
35,35A 35,35A	Tanker Alternate Rendezvous	3C 3C
35,35A 35,35D	Tanker Rendezvous Overrun Procedures	F
		3C
35,35A	Tanker RV Delta (Point Parallel)	
35,35A	Tanker RV Golf (En-route)	3C
35,35C	Tanker A/R Breakaway & Emer. Separation	3C
35,35E	Air-Air Formation Refueling	2B
18,19	Reverse Air-Air Refueling	F
18,19	Emergency Boom Hoist	3B
35B	Platform Control	3C
	CRUISE	
36	Enroute Formation	2B
36	Large Formation departure/join-up	F
36	Large Formation	F
10, 21	Autopilot Off Cruise	3C
32	Radar Ops/WX Avoidance/Windshear	3C
33	Fuel Conservation	3C
21,23	VOR/TAC/FMS Procedures	3C
	AIRWORK	
18,19	Landing Gear Alternate Extension	3C
18,19	Main Flap Manual Operation	3C
	DESCENT	
12	VFR Arrival (Day)	3C
12	VFR Arrival (Night)	3C
	TRANSITION	
15	Go-Around/Missed Approach	3C
26	Visual Approach	3C
13	Night Landing	3C
25,26	Instrument Approach	0
13	Landings	3C
13,14	Right Seat Braking Exercise	F
,	TACTICS TRAINING (Note 1)	
12,38,40	VFR Overhead Pattern - Day	3C
12,38,40	VFR Overhead Pattern - Night	3C
38	Tactical Departure - Day	3C
38	Tactical Departure - Night	3C
38,40	Tactical Arrival - Day	3C
38,40	Tactical Arrival - Day  Tactical Arrival - Night	3C
38,39	Slide Exercise (See Note 2)	3B
38,39	Scram Exercise (See Note 2)  Scram Exercise (Single Ship) (See Note 2)	3B
38,39		
30	Maneuver - Steep Turns (See Note 2)	3B

38	Turning Combat Descent (See Note 2)	3B	
38	Straight Ahead Combat Descent	3B	
38,40	Curvilinear Approach - Day	3C	
38,40	Curvilinear Approach - Night	3C	
38,40	LAHSA (OFT only) (See Note 1)	3C	
38	LAHSD (OFT only) (See Note 1)	3C	

#### **Notes:**

- 1. Tactics training will be accomplished per the AMC KC-135 Tactical Employment Training Syllabus and AFI ll-2KC-135, Volume 1; however, in-flight MIF events will be per the Airplane MIF Table and Notes in this syllabus.
- **2.** May receive credit if accomplished on simulator. Additional simulator is authorized to accomplish, if available. If unable to accomplish training in the OFT, an additional aircraft sortie is authorized.

# Chapter 5 General Instructions

## Section A — Course Flow/Prerequisites

## ACADEMIC TRAINING

Syllabus	bus Prerequisites		Syllabus	Prerequisites		
Event	1	2	Event	1	2	
KPIP2			KXCB2			
KPIP1			KXCB3			
KAPM			KXCN			
KPPM1			KXCB4			
KPAA			KXCB5			
KPHY			KPAD8			
VT01			KPCB2			
KPFT			KXCB6			
KPAD1			KPCB			
KXCA			KPTC			
KPEN1			KXCS			
KPEN2	KPEN1		KPCD			
KPAP			KPOP			
KPEL1			KPGT3			
KPEL2	KPEL1		KPDE			
KPAD2						
KPFU			KPAD9			
KPFU1	KPFU		KPGP			
KPAD3	111 1 0		KXCR			
KPLT			KPAD10			
KPPN1			KPBBX	All Lessons		
KPPN2	KPPN1		IZDAD11	above		
KPAD4	11111		KPAD11			
KPAU (CBT)			CRM			
KPAU	KPAU (CBT)		KPMP1-5	VID1 (D4 #		
KPSD	Mile (CD1)		KPMP6	KPMP1-5		
KPFC1			KPFM1-2			
KPRA1			KPFM3	KPFM1-2		
KPAD5			KPDM			
KPFC2			KPNM1			
KPAO1			KPTU			
KPAO2			KPNM2			
KPAO3			KPDA			
KAIM			KPDI			
KPBAX	All lessons above		KPVF			
KPOX	An iessons above		KPNM3-4			
KPAD6			KPBCX	All lessons above		
KYCB1			KPGW			
			KPFP			
KXRA KPCB1			KAAR			
KPCB1 KPFD			KYAR2	KAAR		
KPAD7			KPCF			
			KPAR1			
KXCI KDCT1			KPAR2	KPAR1		
KPGT1			КРЈР			
KPCM			KPVR			
KPGT2			KPNM5-6			
			111 1 11/15 0			

Syllabus	Prerequisites		Syllabus	Prerequisites		
Event	1	2	Event	1	2	
KPPF			G080I			
KPEP			G080J			
G140			G080C			
KPBDX	All Lessons		G080G			
	above		G110			
KAMRX			G080A			
KPBFX			G080D			
KPEPX	KPBFX		G090			
KPBFX			G182			
KPECX	KPBFX		G190R			
G080E			KPDLX			
G080F			KPPM2			
G080H						

## SIMULATOR AND AIRCRAFT TRAINING

Syllabus	Prerequisites			
Event	1	2		
KPMD01-24				
GS025				
IRC				
LL04/06				
LL08				
KPIB1-5	All events above			
KPIR6				

## Section B — Syllabus Flow

While lessons will normally be taught in sequence, it may be necessary to deviate from this flow due to device availability or unforeseen circumstances. In those cases, schedulers may adjust the syllabus flow as long as lessons remain in the same testing units/blocks/phases, and appropriate prerequisite academic lessons are taught prior to the lessons that they affect.

The syllabus flow sequence may be modified at the discretion of the Contractor Site Manager or training squadron operations officer to maximize training efficiency due to proficiency advancement, unscheduled maintenance malfunctions (ATD or aircraft), weather or support problems. For recommended course flow, refer to table 5.1 below. **Note:** Duration is in tenths of an hour. The number of academic hours listed per block of instruction will remain fixed. The training day or days that a particular block is taught may vary to meet scheduling needs. Student/Instructor ratios may change depending on Air Force throughput requirements.

Table 5.1—Syllabus Flow

<u>DAY</u>	LESSON TITLE	LESSON <u>NUMBER</u>	<u>MEDIUM</u>	<u>DURATION</u>	STUDENT/ INSTRUCTOR RATIO
1	AF Inprocessing	KPIP2	IBT	1.5	40:1
	FSSC Inprocessing and LRC Orientation	KPIP1	IBT	1.5	40:1
	Introduction to CBT	INTRO	CBT	0.5	40:1
	Pubs Maintenance and Associated Directives	KAPM	CBT	1.0	40:1
	Publications Assembly	KPPM1	IBT	4.0	40:1
2	Miscellaneous Flight Instruments	KPAA	CBT	1.0	40:1
	Hydraulic System	KPHY	CBT	2.5	40:1
	Aircraft Field Trip	KPFT	Aircraft	1.5	40:3
	Prep/Review: VR Viewer Exterior Walkaround	VRViewer	CBT	1.0	1:0
	KPAD01 Mission Preparation	KPAD01MP		2.0	1:0
3	Hydraulic System Guided Discussion	KPAD01GD	IBT	2.0	8:1
	Hydraulic System Prebrief	KPAD01PB	IBT	0.5	2:1
	Hydraulic System ATD	KPAD01	OFT	2.0	2:1
	Hydraulic System Debrief	KPAD01DB	IBT	0.5	2:1
	KPAD02 Mission Preparation	KPAD02MP		3.0	1:0
4	Engines System Guided Discussion	KPAD02GD	IBT	2.0	8:1
	Engine Systems	KPEN1	CBT	1.5	40:1
	Engine Malfunctions	KPEN2	CBT	2.0	40:1
	Prep/Review: General study, review, and prep time			2.5	1:0
5	VTRAT	VT01	IBT	4.0	10:1
	VTRAT	VT01	IBT	0.8	1:1
	Prep/Review: General study, review, and prep time			3.2	1:0
6	Engines System Prebrief	KPAD02PB	IBT	0.3	2:1
	Engines System	KPAD02	OFT	2.0	2:1
	Engines System Debrief	KPAD02DB	IBT	0.5	2:1
	Prep/Review: General study, review, and prep time			5.2	1:0
7	CNS/ATM Orientation	KXCA	CBT	2.5	40:1
	Autopilot	KPAP	CBT	1.0	40:1
	Prep/Review: General study, review, and prep time			4.5	1:0

<u>DAY</u>	<u>LESSON TITLE</u>	LESSON <u>NUMBER</u>	<u>MEDIUM</u>	<b>DURATION</b>	STUDENT/ INSTRUCTOR RATIO
8	Electric Systems	KPEL1	CBT	1.0	40:1
	Electric Systems Operations	KPEL2	CBT	1.0	40:1
	Navigation Safety Equipment	KPLT	CBT	1.0	40:1
	KPAD03 Mission Preparation	KPAD03MP	021	2.0	1:0
	Prep/Review: General study, review, and prep time	III / ID 03IVII		3.0	1:0
	Trep/Review. General study, review, and prep time			3.0	1.0
9	Electric System and Autopilot Guided Discussion	KPAD03GD	IBT	2.0	8:1
	Electric System and Autopilot Prebrief	KPAD03PB	IBT	0.3	2:1
	Electric System and Autopilot	KPAD03	OFT	2.0	2:1
	Electric System and Autopilot Debrief	KPAD03DB	IBT	0.5	2:1
	Fuel System	KPFU	CBT	1.5	40:1
	Fuel System Operation	KPFU1	CBT	1.0	40:1
	KPAD 04 Mission Preparation	KPAD04MP		0.7	1:0
10	Fuel System Guided Discussion	KPAD04GD	IBT	2.0	8:1
	Fuel System Prebrief	KPAD04PB	IBT	0.3	2:1
	Fuel System	KPAD04	OFT	2.0	2:1
	Fuel System Debrief	KPAD04DB	IBT	0.5	2:1
		KPPN1	CBT	1.0	40:1
	Pneumatic System Location & Function		CBT		
	Pneumatic System Procedures	KPPN2	СБІ	1.0	40:1
	Prep/Review: Study for Block A Exam			1.0	1:0
11	Auxiliary Power Unit	KPAU	CBT	1.0	40:1
	Auxiliary Power Unit	KPAU	IBT/PTT	1.0	40:1
	Systems Associated Directives	KPSD	CBT	1.0	40:1
	KPAD05 Mission Preparation	KPAD05MP		2.0	1:0
	Prep/Review: Study for Block A Exam			3.0	1:0
12	Pneumatic System and APU Guided Discussion	KPAD05GD	IBT	2.0	8:1
	Pneumatic System and APU Prebrief	KPAD05PB	IBT	0.3	2:1
	Pneumatic System and APU	KPAD05	OFT	2.0	2:1
	Pneumatic System and APU Debrief	KPAD05DB	IBT	0.5	2:1
	Primary Flight Controls	KPFC1	CBT	1.5	40:1
	AN/ARC-164 UHF	KPRA1	CBT	0.5	40:1
	Prep/Review: Study for Block A Exam			1.2	1:0
13	Secondary Flight Controls and EPs	KPFC2	CBT	1.5	40:1
13	Flight Characteristics	KPAO1	CBT	1.0	40:1
	Flight Handling	KPAO2	CBT	1.0	40:1
	Asymmetrical Aerodynamics	KPAO3	CBT	1.0	40:1
			CDI		
	KPAD06 Mission Preparation	KPAD06MP		2.0	1:0
	Prep/Review: Study for Block A Exam			1.5	1:0
14	Flight Controls and Aerodynamics Guided				
	Discussion	KPAD06GD	IBT	2.0	8:1
	Flight Controls and Characteristics Prebrief	KPAD06PB	IBT	0.3	2:1
	Flight Controls	KPAD06	OFT	2.0	2:1
	Flight Controls and Characteristics Debrief	KPAD06DB	IBT	0.5	2:1
	Block A Exam	KPBAX	CBES	1.0	40:1
	Oxygen System	KPOX	CBT	1.0	40:1
	ADIS	KAIM	CBT	1.0	40:1

DAY	LESSON TITLE	LESSON	MEDIUM	DURATION	STUDENT/
		NUMBER			INSTRUCTOR RATIO
15	FMS: Control Display Unit Basics	KXCB1	CBT	1.5	40:1
	AN/ARC-210 VHF/UHF Radio	KXRA	CBT	2.0	40:1
	FMS: COM and NAV Keys	KPCB1	CBT	1.0	40:1
	Flight Director	KPFD	CBT	1.0	40:1
	KPAD07 Mission Preparation	KPAD07MP		2.5	1:0
16	Flight Director, ADIS, O2, ELT, 164/210 Radios Guided Discussion	KPAD07GD	IBT	2.0	8:1
	Flight Director, ADIS, O2, ELT, 164/210 Radios Prebrief	KPAD07PB	IBT	0.3	2:1
	Flight Director, ADIS, O2, ELT, 164/210 Radios	KPAD07	OFT	2.0	1:0
	Flight Director, ADIS, O2, ELT, 164/210 Radios Debrief	KPAD07DB	IBT	0.5	2:1
	IHC and IMFD Menu	KXCI	CBT	2.0	40:1
	IHC and IMFD Menu GIPTT Exercise	KPGT1	PTT	1.0	20:1
17	Multifunction Display (MFD) for Pilots	KPCM	CBT	2.5	40:1
	Map Displays GIPTT Exercise	KPGT2	PTT	1.0	20:1
	FMS: FPLN and DIR Keys	KXCB2	CBT	1.0	40:1
	FMS: EDIT Key	KXCB3	CBT	2.0	40:1
	CNS/ATM Navigation Systems	KXCN	CBT	1.5	40:1
18	CNS/ATM Display/COM/NAV/SATCOM Guided Discussion	KPAD08GD	IBT	2.0	8:1
	CNS/ATM Display/COM/NAV/SATCOM Prebrief	KPAD08PB	IBT	0.3	2:1
	CNS/ATM Display/COM/NAV/SATCOM	KPAD08	OFT	2.0	2:1
	CNS/ATM Display/COM/NAV/SATCOM Debrief	KPAD08DB	IBT	0.5	2:1
	FMS: STR, PSN, IFF/M3, MARK Keys	KXCB4	CBT	1.0	40:1
	FMS: IDX Key	KXCB5	CBT	1.0	40:1
	Prep/Review: Study for Block B Exam			1.2	1:0
19	FMS: MSN and DATA Keys	KPCB2	CBT	1.0	40:1
	FMS: INAV and STAT Keys	KXCB6	CBT	1.0	40:1
	Flight Management System Review	KPCB	IBT	2.5	40:1
	ETCAS	KPTC	CBT	2.0	40:1
	CNS/ATM Surveillance Systems	KXCS	CBT	1.5	40:1
20	CNS/ATM Datalinking	KPCD	CBT	1.5	40:1
	CNS/ATM Operations	KPOP	IBT	3.0	40:1
	Advanced Operations (GIPTT Exercise)	KPGT3	PTT	1.0	20:1
	Associated Directives for KC-135 Operations	KPDE	CBT	1.0	40:1
	KPAD09 Mission Preparation	KPAD09MP		1.5	1:0
21	CNS/ATM Nav and Surveillance Systems Guided Discussion	KPAD09GD	IBT	2.0	8:1
	CNS/ATM Nav and Surveillance Systems Prebrief	KPAD09PB	IBT	0.3	2:1
	CNS/ATM Nav and Surveillance Systems	KPAD09	OFT	2.0	2:1
	CNS/ATM Nav and Surveillance Systems Debrief	KPAD09DB	IBT	0.5	2:1
	KPAD10 Mission Preparation	KPAD10MP		2.0	1:0
	Prep/Review: Study for Block B Exam			1.2	1:0

DAY	<u>LESSON TITLE</u>	LESSON <u>NUMBER</u>	<u>MEDIUM</u>	<u>DURATION</u>	STUDENT/ INSTRUCTOR RATIO
22	CNS/ATM Datalinking Guided Discussion	KPAD10GD	IBT	2.0	8:1
	CNS/ATM Datalinking Prebrief	KPAD10PB	IBT	0.3	2:1
	CNS/ATM Datalinking Treorier	KPAD10	OFT	2.0	2:1
	CNS/ATM Datalinking Debrief	KPAD10DB	IBT	0.5	2:1
	EGPWS	KPGP	CBT	1.5	40:1
	Color Radar for Pilots and Navigators	KXCR	CBT	1.5	40:1
23	Color Radar, ETCAS, EGPWS Guided Discussion	KPAD11GD	IBT	2.0	8:1
	Color Radar, ETCAS, EGPWS Prebrief	KPAD11PB	IBT	0.3	2:1
	Color Radar, ETCAS, EGPWS	KPAD11	OFT	2.0	2:1
	Color Radar, ETCAS, EGPWS Debrief	KPAD11DB	IBT	0.5	2:1
	Prep/Review: Study for Block B Exam			1.2	1:0
	Block B Exam	KPBBX	CBES	1.0	40:1
	KC-135R Interior Inspection DVD	KPPV.D		1.0	2:1
24	Crew Resource Management (CRM)	CRM	IBT	8.0	40:1
25	Takeoff Data 1	KPMP1	CBT	1.0	40:1
	Takeoff Data 2	KPMP2	CBT	1.0	40:1
	Takeoff Data 3	KPMP3	CBT	1.5	40:1
	Takeoff Data 4	KPMP4	CBT	1.5	40:1
	Landing Data	KPMP5	CBT	1.0	40:1
	FSAS Calculator Exercises	KPMP	PTT	1.0	40:1
		Kr Wir	FII	1.0	1:0
	Prep/Review: Dash 1 study			1.0	1:0
26	FSAS Calculator Lab (Class)	KPMP6	IBT	2.0	40:1
	FSAS Calculator Lab	KPMP6.WB	PTT	1.5	40:1
	Fuel Savings Advisory System Basics	KPFM1	CBT	1.0	40:1
	Fuel Savings Advisory System Performance	KPFM2	CBT	1.0	40:1
	ATD Exercise for FSAS	KPFM3	FSAS	1.0	1:0
	Associated Directives for Mission Planning	KPDM	CBT	1.0	40:1
	Prep/Review: Dash 1 Study			0.5	1:0
27	Mission Planning for Mission 1	KPMD01MP		1.0	2:0
	Ground Movement and Takeoff Procedures Mission	KPMD01/02	IBT	2.0	8:1
	Study	MS	151		
	KC-135R Interior Inspection	KPPV.D		1.0	1:0
	Normal Procedures	KPNM1	CFT	3.0	2:1
	Prep/Review: General study, review, and prep time			1.0	1:0
28	Turns During Climbout	KPTU	CBT	1.0	40:1
	Ground Movement and Takeoff Procedures Prebrief	KPMD01PB	IBT	0.5	2:1
	Ground Movement and Takeoff Procedures	KPMD01	OFT	4.0	2:1
	Ground Movement and Takeoff Procedures Debrief	KPMD01DB	IBT	1.0	2:1
	Prep/Review: General study, review, and prep time			1.5	1:0
29	Normal Procedures 2	KPNM2	CFT	3.0	2:1
	Associated Directives for Air Refueling	KPDA	CBT	1.0	40:1
	Associated Directives Seminar	KPDI	IBT	2.0	40:1
	Mission Planning for Mission 2	KPMD02MP		1.0	2:0
	Prep/Review: General study, review, and prep time	111111111111111111111111111111111111111		1.0	1:0
	Trep/review. General study, review, and prep time			1.0	1.0

					33
<u>DAY</u>	LESSON TITLE	LESSON <u>NUMBER</u>	<u>MEDIUM</u>	<b>DURATION</b>	STUDENT/ INSTRUCTOR RATIO
30	Ground Movement and Takeoff Procedures Prebrief	KPMD02PB	IBT	0.5	2:1
	Ground Movement and Takeoff Procedures	KPMD02	OFT	4.0	2:1
	Ground Movement and Takeoff Procedures Debrief	KPMD02DB	IBT	1.0	2:1
	Prep/Review: Practice normal procedures		CFT	2.5	2:0
31	Mission Planning for Mission 3	KPMD03MP		1.0	2:0
	Full Stop and Touch-and-Go Landing Procedures Mission Study	KPMD03/04 MS	IBT	2.0	8:1
	VFR Arrival and Departure	KPVF	CBT	1.0	40:1
	Prep/Review: General study, review, and prep time			4.0	1:0
32	Full-Stop Landing Procedures Prebrief	KPMD03PB	IBT	0.5	2:1
	Full-Stop Landing Procedures	KPMD03	OFT	4.0	2:1
	Full-Stop Landing Procedures Debrief	KPMD03DB	IBT	1.0	2:1
	Prep/Review: General study, review, and prep time			2.5	1:0
33	Normal Procedures 3	KPNM03	CFT	2.5	2:1
	Normal Procedures 4	KPNM04	FSAS	2.0	2:1
	Prep/Review: Study for Block C Exam			3.5	1:0
34	Mission Planning for Mission 4	KPMD04MP		1.0	2:0
	Full-Stop and Touch-and-Go Landing Procedures Prebrief	KPMD04PB	IBT	0.5	2:1
	Full-Stop and Touch-and-Go Landing Procedures	KPMD04	OFT	4.0	2:1
	Full-Stop and Touch-and-Go Landing Procedures Debrief	KPMD04DB	IBT	1.0	2:1
	Prep/Review: General study, review, and prep time			1.5	1:0
35	Mission Planning for Mission 5	KPMD05MP		1.0	2:0
	Patterns and Approaches Mission Study	KPMD05/06 MS	IBT	2.0	8:1
	Block C Exam	KPBCX	CBES	1.0	40:1
	Gusts and Windshear	KPGW	IBT	2.0	40:1
	Prep/Review: Practice normal procedures		CFT	2.0	2:0
36	Approaches Prebrief	KPMD05PB	IBT	0.5	2:1
	Approaches	KPMD05	OFT	4.0	2:1
	Approaches Debrief	KPMD05DB	IBT	1.0	2:1
	Prep/Review: General study, review, and prep time			2.5	1:0
37	Mission Planning for Mission 6	KPMD06MP		1.0	2:0
	Mission Planning	KPFP	CBT	1.0	40:1
	Prep/Review: Practice normal procedures		CFT	2.0	2:0
	Prep/Review: ATP-56(B)			4.0	
38	Patterns and Approaches Prebrief	KPMD06PB	IBT	0.5	2:1
	Patterns and Approaches	KPMD06	OFT	4.0	2:1
	Patterns and Approaches Debrief	KPMD06DB	IBT	1.0	2:1
	Air Refueling Basics	KAAR	CBT	1.0	40:1
	Air Refueling Aerodynamics	KYAR2	CBT	1.0	40:1
	Prep/Review: ATP-56(B)			0.5	1:0

<u>DAY</u>	LESSON TITLE	LESSON <u>NUMBER</u>	<u>MEDIUM</u>	<u>DURATION</u>	STUDENT/ INSTRUCTOR RATIO
39	Air Refueling Operations	KPAR1	IBT/PTT	3.0	40:1
	Formation Flying	KPCF	IBT	2.0	40:1
	Air Refueling Seminar	KPAR2	IBT	1.0	40:1
	Mission Planning for Mission 7	KPMD07MP		2.0	2:0
40	Aerodynamics Mission Study	KPMD07MS	IBT	2.0	8:1
	Aerodynamics Prebrief	KPMD07PB	IBT	0.5	2:1
	Aerodynamics	KPMD07	OFT	4.0	2:1
	Aerodynamics Debrief	KPMD07DB	IBT	1.0	2:1
	Prep/Review: KC-135 Enabling Concept			0.5	1:0
41	PFPS Mission Planning	KPFP	IBT	4.0	20:1
	National Aerospace and VFR	KPVR	CBT	1.5	40:1
	Jeppesen Approach Plate Study	KPJP	CBT	1.5	40:1
	Prep/Review: Practice normal procedures		CFT	1.0	2:0
42	PFPS Mission Planning	KPFP	IBT	4.0	20:1
	Normal Procedures Prebrief	KPNM05PB	IBT	0.5	2:1
	Normal Procedures	KPNM05	OFT	3.0	2:1
	Normal Procedures Debrief	KPNM05DB	IBT	0.5	2:1
43	PFPS Mission Planning	KPFP	IBT	4.0	20:1
	Prep/Review: General study, review, and prep time			4.0	1:0
44	Mission Planning for Mission 8	KPMD08MP		1.0	2:0
	Normal Procedures, Including A/R Mission Study	KPMD08/09 MS	IBT	2.0	8:1
	Prep/Review: Practice normal procedures	1115	CFT	1.0	2:0
	Normal Procedures Prebrief	KPNM06PB	IBT	0.5	2:1
	Normal Procedures	KPNM06	OFT	3.0	2:1
	Normal Procedures Debrief	KPNM06DB	IBT	0.5	2:1
		KINWOODD	шт	0.5	2.1
45	Normal Procedures, Including A/R Prebrief	KPMD08PB	IBT	0.5	2:1
	Normal Procedures, Including A/R	KPMD08	OFT	4.0	2:1
	Normal Procedures, Including A/R Debrief	KPMD08DB	IBT	1.0	2:1
	DAFIF Data Loading Procedures	KPPF	CBT	0.5	40:1
	Prep/Review: General study, review, and prep time			2.0	1:0
46	Emergency Procedures	KPEP	IBT	7.0	40:1
	Mission Planning for Mission 9	KPMD09MP		1.0	2:0
47	Normal Procedures, Including Air Refueling Prebrief	KPMD09PB	IBT	0.5	2:1
	Normal Procedures, Including Air Refueling	KPMD09	OFT	4.0	2:1
	Normal Procedures, Including Air Refueling Debrief	KPMD09DB	IBT	1.0	2:1
	Prep/Review: Flight Crew Data Link Guidance for Link 2000+ Services			2.5	1:0
48	Mission Planning for Mission 10	KPMD10MP		1.0	2:0
	Engines Mission Study	KPMD10MS	IBT	2.0	8:1
	Prep/Review: Block D Exam			3.0	1:0
	Prep/Review: General study, review, and prep time			2.0	1:0
49	Engines Prebrief	KPMD10PB	IBT	0.5	2:1
	Engines	KPMD10	OFT	4.0	2:1
	Engines Debrief	KPMD10DB	IBT	1.0	2:1
	Prep/Review: General study, review, and prep time			2.5	1:0

<u>DAY</u>	LESSON TITLE	LESSON	<u>MEDIUM</u>	<b>DURATION</b>	35 STUDENT/
<u>DA1</u>	LESSON TITLE	NUMBER	MEDIUM	DURATION	INSTRUCTOR RATIO
50	Mission Planning for Mission 11	KPMD11MP		1.0	2:0
	Fuels Mission Study	KPMD11MS	IBT	2.0	8:1
	RVSM	G140	CBT	1.0	40:1
	Prep/Review: Block D Exam			2.5	1:0
	Prep/Review: General study, review, and prep time			1.5	1:0
51	Fuels Prebrief	KPMD11PB	IBT	0.5	2:1
	Fuels	KPMD11	OFT	4.0	2:1
	Fuels Debrief	KPMD11DB	IBT	1.0	2:1
	Prep/Review: General study, review, and prep time			2.5	1:0
52	Mission Planning for Mission 12	KPMD12MP		1.0	2:0
	Datalink Scenario #3 Mission Study	KPMD12MS	IBT	2.0	8:1
	Block D Exam	KPBDX	CBES	1.0	40:1
	Prep/Review: Emergency Procedures and Bold Face Exams			4.0	1:0
53	Mildenhall to Ramstein Prebrief	KPMD12PB	IBT	0.5	2:1
33	Mildenhall to Ramstein	KPMD121 B	OFT	4.0	2:1
	Mildenhall to Ramstein Debrief	KPMD12DB	IBT	1.0	2:1
	Prep/Review: General study, review, and prep time	KI MID12DB	ш	2.5	1:0
					1.0
54	Aircraft Marshalling Exam	KAMRX	CBES	0.5	40:1
	Mission Planning for Mission 13	KPMD13MP		1.0	2:0
	Prep/Review: Emergency Procedures and Bold Face Exams			4.0	1:0
	Prep/Review: General study, review, and prep time			2.5	1:0
55	M-10, Pilot Proficiency Prebrief	KPMD13PB	IBT	1.0	2:1
	M-10, Pilot Proficiency	KPMD13	OFT	4.0	2:1
	M-10, Pilot Proficiency Debrief	KPMD13DB	IBT	1.0	2:1
	Prep/Review: Emergency Procedures Exam			2.0	1:0
56	Mission Planning for Mission 14	KPMD14MP		1.0	2:0
	Hydraulics Mission Study	KPMD14MS	IBT	2.0	8:1
	Bold Face Emergency Procedures Exam	KPBFX	IBT TST	0.5	40:1
	Emergency Procedures Exam	KPEPX	CBES	1.0	40:1
	Prep/Review: End-of-Course Test			3.5	1:0
57	Hydraulics Prebrief	KPMD14PB	IBT	0.5	2:1
	Hydraulics	KPMD14	OFT	4.0	2:1
	Hydraulics Debrief	KPMD14DB	IBT	1.0	2:1
	Prep/Review: General study, review, and prep time			2.5	1:0
58	Mission Planning for Mission 15	KPMD15MP	IDT	1.0	2:0
	Electrics Mission Study	KPMD15MS	IBT	2.0	8:1
	Prep/Review: End-of-Course and Boldface Exams			5.0	1:0
59	Electrics Prebrief	KPMD15PB	IBT	0.5	2:1
	Electrics	KPMD15	OFT	4.0	2:1
	Electrics Debrief	KPMD15DB	IBT	1.0	2:1
	Prep/Review: FANS-1/A Operations Manual, datalink procedures on GIPTT			2.5	1:0

<u>DAY</u>	<u>LESSON TITLE</u>	LESSON <u>NUMBER</u>	<u>MEDIUM</u>	<b>DURATION</b>	STUDENT/ INSTRUCTOR RATIO
60	Mission Planning for Mission 16	KPMD16MP		1.0	2:0
	Datalink Scenario Mission Study	KPMD16MS	IBT	2.0	8:1
	Prep/Review: FANS-1/A Operations Manual,			2.5	1:0
	datalink procedures on GIPTT				
	Bold Face Emergency Procedures Exam	KPBFX	IBT TST	0.5	40:1
	End-of-Course Test	KPECX	CBES	1.0	40:1
	Prep/Review: General study, review, and prep time			1.0	1:0
	1 7/ / 1 1				
61	Keflavik to Mildenhall Prebrief	KPMD16PB	IBT	0.5	2:1
	Keflavik to Mildenhall	KPMD16	OFT	4.0	2:1
	Keflavik to Mildenhall Debrief	KPMD16DB	IBT	1.0	2:1
	Prep/Review: General study, review, and prep time			2.5	1:0
62	Flightline Class Briefing			2.5	20:1
	Aircrew Flight Equipment	LL04/06	IBT	2.0	4:1
	Egress Training	LL03 IRCHT	IBT	1.0	4:1
	KC-135 IRC Hot Topics	Hxxx	IBT	1.0	1:0
	Immunizations (Update shots as needed)			1.0	1:0
63	Tactics	G060	IBT	4.0	40:1
03	Aircrew IntelligenceTraining (AIT)	G070	IBT	4.0	40:1
	Anticiew intelligence Hamming (AHT)	0070	ш	4.0	40.1
64	IRC Test	IRC	TST	4.0	40:1
	Simple Key Loader	G080I	CBT	0.5	40:1
	KY-58 Secure Voice	G080F	CBT	0.5	40:1
	HAVE QUICK with AN/ARC-164	G080E	CBT	0.5	40:1
	ACS with CDU	G080H	CBT	1.0	40:1
	Prep/Review: General study, review, and prep time			1.5	1:0
<i>(5</i>	Missian Discourse for Missian 17	ZDMD17MD		1.0	2.0
65	Mission Planning for Mission 17	KPMD17MP	тот	1.0	2:0
	M-10, Pilot Proficiency Prebrief	KPMD17PB KPMD17	IBT	0.5	2:1
	M-10, Pilot Proficiency M-10, Pilot Proficiency Debrief		OFT IBT	4.0 1.0	2:1 2:1
		KPMD17DB	CBT		
	HAVE QUICK with CDU Prep/Review: General study, review, and prep time	G080J	CDI	0.5 0.5	40:1 1:0
	rrep/keview. General study, review, and prep time			0.3	1.0
66	Mission Planning for Mission 18	KPMD18MP		1.0	2:0
	Flight Controls Mission Study	KPMD18MS	IBT	2.0	8:1
	ACS with HF1 Backup Control Panel	G080G	CBT	1.0	40:1
	Identification, Friend or Foe System	G080C	CBT	0.5	40:1
	Level 1 Antiterrorism (AT) Awareness Training	G110	CBT	1.0	40:1
	Prep/Review: Practice normal procedures		CFT	1.5	2:0
67	Flight Controls Prebrief	KPMD18PB	IBT	0.5	2:1
	Flight Controls	KPMD18	OFT	4.0	2:1
	Flight Controls Debrief	KPMD18DB	IBT	1.0	2:1
	Prep/Review: General study, review, and prep time			2.5	1:0
68	Mission Planning for Mission 19	KPMD19MP		1.0	2:0
00	Pneumatics Mission Study	KPMD19MS	IBT	2.0	8:1
	Prep/Review: Practice normal procedures	131 1411/1/13	CFT	2.0	2:0
	Prep/Review: General study, review, and prep time		011	3.0	1:0
	125p. 12710 Selletal stady, to tion, and prop time			5.0	0

<u>DAY</u>	LESSON TITLE	LESSON NUMBER	<u>MEDIUM</u>	<b>DURATION</b>	STUDENT/ INSTRUCTOR RATIO
69	Pneumatics Prebrief Pneumatics Pneumatics Debrief	KPMD19PB KPMD19 KPMD19DB	IBT OFT IBT	0.5 4.0 1.0	2:1 2:1 2:1
	Prep/Review: General study, review, and prep time			2.5	1:0
70	Mission Planning for Mission 20	KPMD20MP	ID#	1.0	2:0
	Datalink Scenario #9 Mission Study AFSIR	KPMD20MS G080A	IBT CBT	2.0 0.5	8:1 40:1
	Prep/Review: Practice Datalink Procedures or study Dash 1 or other reference materials	G000/1	CD1	4.5	1:0
71	Datalink Scenario #9 (Diego Garcia to Fujairah) Prebrief	KPMD20PB	IBT	0.5	2:1
	Datalink Scenario #9 (Diego Garcia to Fujairah)	KPMD20	OFT	4.0	2:1
	Datalink Scenario #9 (Diego Garcia to Fujairah) Debrief	KPMD20DB	IBT	1.0	2:1
	Prep/Review: General study, review, and prep time			2.5	1:0
72	Mission Planning for Mission 21	KPMD21MP		1.0	2:0
	Datalink Scenario #7 Mission Study	KPMD21MS	IBT	2.0	8:1
	COMSEC User Requirements	G080D	CBT	1.0	40:1
	Antihijacking	G090	CBT	0.5	40:1
	Prep/Review: General study, review, and prep time			3.5	1:0
73	Datalink Scenario #7 (Eielson to Yokota) Prebrief	KPMD21PB	IBT	0.5	2:1
	Datalink Scenario #7 (Eielson to Yokota)	KPMD21	OFT	4.0	2:1
	Datalink Scenario #7 (Eielson to Yokota) Debrief	KPMD21DB	IBT	1.0	2:1
	Prep/Review: General study, review, and prep time			2.5	1:0
74	Mission Planning for Mission 22	KPMD22MP		1.0	2:0
	Proficiency Training Mission Study	KPMD22MS	IBT	2.0	8:1
	Aircraft Servicing	G190R	CBT	1.0	40:1
	Hazardous Cargo	G182	CBT	2.5	40:1
	Prep/Review: General study, review, and prep time			1.5	1:0
75	Proficiency Training Prebrief	KPMD22PB	IBT	0.5	2:1
	Proficiency Training	KPMD22	OFT	4.0	2:1
	Proficiency Training Debrief	KPMD22DB	IBT	1.0	2:1
	Prep/Review: General study, review, and prep time			2.5	1:0
76	Datalink Certification Examination	KPDLX	CBES	2.0	40:1
	Publications Page Count	KPPM2	IBT	3.0	40:1
	Mission Planning for Mission 23	KPMD23MP		1.0	2:0
	Prep for Checkride Mission Study	KPMD23MS	IBT	2.0	8:1
77	M010, Pilot Proficiency Prebrief	KPMD23PB	IBT	1.0	2:1
	M010, Pilot Proficiency	KPMD23	OFT	4.0	2:1
	M010, Pilot Proficiency Debrief	KPMD23DB	IBT	1.0	2:1
	Prep/Review: Review for KPMD24			2.0	1:0
78	Prep/Review: Review for KPMD24			1.0	1:0
	Ground Eval Mission Planning	KPMD24MP	IBT	2.0	2:0
	Prep/Review: AF Eval OFT Mission			5.0	1:0
79	Instrument/Qualification Checkride	KPMD24	OFT	7.0	2:1

DAY	<u>LESSON TITLE</u>	LESSON <u>NUMBER</u>	<u>MEDIUM</u>	<u>DURATION</u>	STUDENT/ INSTRUCTOR RATIO	
FLIGHTLINE						
80-100	Aircraft Field Trip	GS025	FT	2.0	4:1	
	Flightline OFT (MOA/Tactics)		OFT	7.0	2:1	
	Aircraft Proficiency and Flight Evaluation	KPIB1-6	KC-135	98.5	2:1	

## Section C — Bibliography

- 1. Publications students use throughout KC-135 training are available in three different ways. Paragraph 2 below lists publications that a student uses frequently and these are to be issued as paper copies. Paragraph 3 lists publications that a student uses occasionally and these may be provided in an electronic format, such as CDs and issued laptops in accordance with current governing directives. 97 TRS/TRA is responsible for developing procedures to ensure students have access to the most current information and for disseminating all changes to the publications/regulations. Paragraph 4 lists those publications students use infrequently. These publications are available from .mil computers from the AF Publications website located at http://www.e-publishing.af.mil/.
- **2.** *Training material issued as paper copies* (students should return all items with an asterisk \* upon KC-135 course completion.)
  - a. All KC-135 academic courseware
  - b. T.O. 1C-135(K)R(II)-1CL-1, *Pilots' Abbreviated Flight Crew Checklist USAF KC-135R/T Aircraft [GATM]* and all approved inserts
  - c. T.O. 1C-135(K)R(II)-1CL-1-1, Pilots' Fanfold Checklist USAF KC-135R/T Aircraft [GATM]
  - d. T.O. 1C-135(K)R(II)-1CL-3, Boom Operators' Abbreviated Flight Crew Checklist USAF KC-135R/T Aircraft [GATM] and all approved inserts
  - e. T.O. 1C-135(K)R(II)-1CL-3-1, Boom Operators' Fanfold Checklist USAF KC-135R/T Aircraft [GATM]
  - f. T.O. 1C-135-5-1, Basic Weight Checklist, MX Data, Loading Data, and Fuel Loading Data
  - g. T.O. 1C-135-9CL-1, Cargo Loading/Unloading Checklist
  - h. Altus In-Flight Guide, Parts 1, 2 and 3\*
  - i. Student Handout—KC-135 Cockpit poster (Approximately 11"×17")

### 3. Training materials issued in digital format removable media

- a. T.O. 1C-135(K)(I)-1, Flight Manual [GATM], Reference Data
- b. T.O. 1C-135(K)R(II)-1, Flight Manual [GATM], Inflight Data
- c. T.O. 1-C-135(K)R-1-1, Flight Manual, Performance Data
- d. T.O. 1C-135(K)R(II)-1CL-1, Pilots' Abbreviated Flight Crew Checklist USAF KC-135R/T Aircraft [GATM]
- e. T.O. 1C-135(K)R(II)-1CL-3, Boom Operators' Abbreviated Flight Crew Checklist USAF KC-135R/T Aircraft [GATM]
- f. T.O. 1-C-135-9, Cargo Loading Manual
- g. T.O. 1-C-135-101, AFTO 76, Aircraft Structural Assessment Data
- h. T.O. 00-25-172, Ground Servicing of Aircraft and Static Grounding/Bonding
- i. AFTTP 3-3.KC-135, KC-135 Combat Aircraft Tactics
- j. AFI 11-2KC-135, Vol. 1, C/KC-135 Aircrew Training
- k. AFI 11-2KC-135, Vol. 2, C/KC-135 Aircrew Evaluation Criteria
- 1. AFI 11-2KC-135, Vol. 3, C/KC-135 Operations Procedures and all addenda
- m. AFI 11-202, Vol. 1, Aircrew Training

- n. AFI 11-202, Vol. 2, Aircrew Standardization/Evaluation Program
- o. AFI 11-202, Vol. 3, General Flight Rules
- p. AMCI 11-208, Tanker/Airlift Operations
- q. AFMAN 11-217, Vol. 1 & 3, Instrument Flight Procedures and Supplemental Flight Information
- r. AFMAN 36-2236, Guidebook for Air Force Instructors
- s. ATP -56(B) (Parts 1 & 2, Annex Z), Allied Tactical Publication 56(B), Air-to-air Refueling
- t. Pilot Master Question File (AMC standard and local)
- u. Boom Operator Master Question File (AMC standard and local)
- v. KC-135 Weight & Balance Program
- w. FCBs, Flight Crew Bulletins
- x. AMC Aircrew Border Clearance Guide

### 4. Training materials available for review on military websites.

- a. AFI 11-201, Flight Information Publications
- b. AFI 13-203, Air Traffic Control
- c. AFJI 11-204, Operational Procedures for Aircraft Carrying Hazardous Materials
- d. AFI 11-205, Aircraft Cockpit and Formation Flight Signals
- e. AMCI 11-206, Mobility Force Management
- f. AMCI 11-207, AMC Weapons and Tactics Program
- g. AFI 11-208(I), DoD NOTAM System
- h. AFH 11-203, Vol. 1 & 2, Weather for Aircrews
- i. AFI 11-209, Aerial Event Policy and Procedures and AETC Supplement
- j. AFMAN 11-210, Instrument Refresher Program
- k. AMCI 11-210, Airport Qualification Program
- 1. AFI 11-214, Air Operations Rules and Procedures and AETC Supplement
- m. AMCH 11-214, AMC Aircrew Hazardous Materials Handbook
- n. AFI 11-215, USAF Flight Manuals Program and AETC Supplement
- o. AFPAM 11-216, Air Navigation
- p. AFI 11-230, Instrument Procedures
- q. AF Pamphlet 11-238, Aircrew Quick Reference to METAR/TAF Codes
- r. AFI 11-218, Aircraft Operations and Movement on the Ground and AETC Supplement
- s. AFI 11-222, Tanker Activity Report
- t. AFI 11-246v6, Air Force Aircraft Demonstrations (C-17, C-130, C-141, C/KC/NKC-135, UH-1)
- u. AFI 11-290, Cockpit/Crew Resource Management Training Program, & AETC Supplements
- v. AFI 11-301, Vol. 1 & 2, Aircrew Flight Equipment Program and AETC Supplements
- w. AFI 11-401, Aviation Management and AETC Supplement
- x. AFI 11-403, Air Force Aerospace Physiological Training Program
- y. AFI 11-418, Operations Supervision
- z. AFI 13-201, Air Force Airspace Management
- aa. AMCI 24-101, Vol. 16, Military Airlift Border Clearance
- bb. AFM 24-204(I), Preparing Hazardous Materials for Military Air Shipments
- cc. AFI 91-202, The US Air Force Mishap Prevention Program
- dd. AETCI 36-2205, Formal Aircrew Training Administration and Management
- ee. DOD 4500.54-G, DoD Foreign Clearance Guide
- ff. DOD 4515.13R, Air Transportation Eligibility

#### **Notes:**

- 1. When authorized, if wings elect to use removable media or laptops, issue them to students via hand receipt. These items will be returned to the bookstore upon the student's graduation or removal from training. These media contain all the nonproprietary general publications each student requires throughout their training, identified in paragraph 2 above. Students are required to keep these publications current via the base's e-Pubs procedures. Students are responsible for notifying their flight commander should the removable media become lost, damaged, or stolen.
- 2. All information kept on removable media other than the publications, must be FOR OFFICIAL BUSINESS. Personal files containing privacy act information are prohibited. IAW AFI 31-401 removable media devices must be properly labeled and treated accordingly. Students are held responsible for adhering to the policies and training received from their Information Assurance Training.
- 3. The printing of technical orders, Air Force/AETC instructions, and other general publications from electronic media on government equipment is strictly prohibited.
- 4. The above lists are the minimum required publications and may be supplemented by the wings/squadrons. Additionally, the wings may elect to provide some of the listed publications in alternative formats (i.e., paper version of an electronic publication, or an electronic version of a document from the internet). However, the publication/document will also be provided in the format listed above.
- 5. Direct any questions regarding this list to the wing Bookstore.

## Section D — Glossary

### **Abbreviations and Acronyms**

A035 KC135A035 (Block 40 to Block 30 Differences Course)

AA Approving Authority
AAR Air-to-Air Refueling

A/P Autopilot

AC Aircraft Commander

ACIQ (PTX1) KC135ACIQ (KC-135 Aircraft Commander Initial Qualification Course)
ACRQ (PTX2) KC135ACRQ (KC-135 Aircraft Commander Requalification Course)

AETC Air Education and Training Command

AETCI Air Education and Training Command Instruction

AFB Air Force Base

AFE Aircrew Flight Equipment
AFI Air Force Instruction

AFMSS Air Force Mission Support System

AOA Angle of Attack
APU Auxiliary Power Unit
ARA Airborne Radar Approach
ARTCC Air Route Traffic Control Center

AT Additional Training
ATD Aircrew Training Device
ATS Aircrew Training System

BFTC KC135BFTC (KC-135 Boom Operator Faculty Training Course)
BIQ KC135BIQ (KC-135 Boom Operator Initial Qualification Course)

BOPTT Boom Operator Part-Task Trainer
BOWST Boom Operator Weapon System Trainer

BTX2 KC135BTX2 (KC-135 Boom Operator Transition Course 2)

CAP Commander's Awareness Program

CBES KC-135 Computer-Based Evaluation System

CBT Computer-Based Training

CFETP Career Field Education and Training Plan

CFT Cockpit Familiarization Trainer

CLT Cargo Load Trainer

CNS/ATM Communications, Navigation, Surveillance/Air Traffic Management

CPT Cockpit Procedures Training
CRM Crew Resource Management
CTS Course Training Standard
DME Distance Measuring Equipment
D/P Demonstration/Performance

E-TCAS Enhanced Traffic Alert and Collision Avoidance System

EFTOC Engine Failure—Takeoff-Continued

EOC End of Course

ETAS Estimated Time Arrive Station

ETCA Education and Training Course Announcements

EWO Emergency War Order

EXAM Examination

FCIF Flight Crew Information File
FEB Flight Evaluation Board
FEF Flight Evaluation Folder
FIGURE Flight Language Publication

FLIP Flight Information Publications FSSC FlightSafety Services Corporation

FT Field Trip

FTC Faculty Training Course

FTU Flying Training Unit; Formal Training Unit

GATM Global Air Traffic Management
GIPTT GATM Interactive Part Task Trainer

GSDI Groundspeed Drift Indicator

GT Ground Training

HEFOE Hydraulics, Electrics, Fuel, Oxygen, Engines Check

HF High Frequency Radio IA Initiating Authority

IAC KC135IAC (KC-135 Instructor Aircraft Commander Course)

IAC Interactive Animated Classroom

IAW In Accordance With

IB KC135IB (KC-135 Instructor Boom Operator Course)

IBT Instructor-Based Training

IC Instructor Course

IFF Identification Friend or FoeIFMP Integrated Fuel Management Panel

IN KC135IN (KC-135 Instructor Navigator Course)

INS Inertial Navigation System

IP KC135IP (KC-135 Instructor Pilot Course)

IP Instructor Pilot

IRC Instrument Refresher Course
KIAS Knots Indicated Airspeed

MA Missed Approach

MAC Mean Aerodynamic Chord

MAG Magnetic

MAP Missed Approach Point
MBL Manual Boom Latching
MITO Minimum Interval Takeoff
MIF Maneuver Item File

MLS Microwave Landing System
MOA Manifestation of Apprehension

MTL/ESD Master Task List/Evaluation Standards Document

NBQ KC135NIQ (KC-135 Navigator Basic Qualification Course)

NOTAM Notice to Airman

OFT Operational Flight Trainer
OPR Office of Primary Responsibility

OPS Operations

ORM Operational Risk Management
PFPS Portable Flight Planning System

PFTC KC135PFTC (Pilot Faculty Training Course)
PL Performance Level; Proficiency Level

PMC Power Management Control PRC Progress Review Committee

PTT Part-Task Trainer

PTX1 KC135PTX1 (Pilot Transition Course 1)
PTX2 KC135PTX2 (Pilot Transition Course 2)
PTX3 KC135PTX3 (Pilot Transition Course 3)

RA Reviewing Authority
RPL Required Proficiency Level

RPO Rudder Power Off

RZ Rendezvous

SATCOM Satellite Communication
SIMCERT Simulator Certification
SNS Satellite Navigation Station

SOC KC135SOC (Senior Officer Course Flying)

SS Self-Study
SST Self-Study Time
T.O. Technical Order

TACAN Tactical Aid to Navigation; Tactical Air Navigation
TAPR Training Accomplishment Performance Report

TCH Threshold Crossing Height
TD Training Day; Training Device
TERPS Terminal and Enroute Procedures

TMO Tanker Manual Operation
TMS Training Management System
TRP Training Review Process

TST Test

UHF Ultra High Frequency
VHF Very High Frequency

VTRAT Visual Threat Recognition and Avoidance Training

WB Workbook

WST Weapons System Trainer

# Section E — Lexicon of Terms

**Block**—Unit of training

Category of Training—All training of a particular type: transition, formation, etc.

Category 1 Route—A Category 1 route is defined as any route on which the position of the aircraft cannot be accurately determined by the overhead crossings of a radio aid (NDB, TACAN, VOR) at least once each hour with positive course guidance between the radio aids.

**Course Training Standards (CTS)**—The training standards describing the skills and degree of proficiency required of the graduates of this course.

**Crew Integrity Day**—Additional time that may be added to the syllabus to facilitate keeping classes together when accomplishment of the schedule is limited by resources.

Flight Evaluation—AF IMT 8 flight evaluation administered by a flight examiner.

**Flying Evaluation Board (FEB)**—An administrative, fact-finding proceeding designed to ensure the quality control of the rated force. A board consists of rated officers who are qualified for aviation service and are serving in an active ASC. Board members examine a rated officer's professional qualification for aviation service, evaluate potential for use in future rated duties, and make recommendations to higher authorities.

Level 1 Training—KC-135 Initial Qualification training.

Maneuver Item File (MIF)—A listing of all maneuvers, and proficiency required in each maneuver, for all lessons in this course.

Night Vision Goggles—Special goggles that allow vision at night, greatly increasing navigation and safety of flight.

**Proficiency Advancement**—Advancement based on the student's satisfactory achievement of unit objectives prior to the end of a unit.

**Progress Review Committee (PRC)**—The PRC is an administrative, fact-finding proceeding conducted when an enlisted aircrew member fails to meet established training standards or has requested voluntary disqualification from aviation service.

**Sortie**—An aircraft sortie begins at takeoff and ends at the closeout time documented in the AFTO Form 781. A simulator sortie begins when the training event starts and is completed when the training event ends.

**Syllabus Event**—Any individual academic, simulator, or flying event, accomplished and graded complete. Normally two syllabus events are accomplished during each aircraft sortie.

Training Management System (TMS)—A computer system used to manage courses of training.

**Unit of Training**—A group of lessons in any category identified by the following: The same last two numbers in the lesson designator. The same list of maneuvers and objectives.